<ART-027-0>

SERVICE MANUAL

AM/FM STEREO RECEIVER

SX-626

KCW, KUW, FVZW, NBW, FW

NOTE:

MODEL SX-626 COMES IN FIVE VERSIONS DISTINGUISHED AS FOLLOWS:

Round label on rear panel	Voltage	Type
KCW	120V only	CSA approved (Canada)
KUW	120V only	UL approved (U.S.A.)
FVZW	5-position selector	FTZ approved (West Germany)
NBW	220V only	SEMCO (Sweden), NEMCO (Norway) and DEMCO (Denmark) approved
FW	5-position selector	General export model with de-emphasis selector switch

<73G02Y81D>

PIONEER®

CONTENTS

1. SPECIFICATIONS 3
2. FRONT PANEL FACILITIES 5
3. CONNECTION DIAGRAM 7
4. BLOCK DIAGRAM 9
5. DISASSEMBLY 11
6. PARTS AND P.C. BOARD LOCATION
   - 6.1 Top View 12
   - 6.2 Bottom View 13
7. ALIGNMENT PROCEDURE
   - 7.1 Required measuring instruments 14
   - 7.2 AM adjustment 14
   - 7.3 FM adjustment 14
8. DIAL CORD STRINGING 15
9. PACKING METHOD AND PART NUMBERS 16
10. EXPLODED VIEW AND PARTS LIST 16
11. SCHEMATIC DIAGRAMS, P.C. BOARD PATTERNS AND PARTS LIST
    - 11.1 Circuit Connection Diagram and Miscellaneous Parts 21
    - 11.2 Tuner Assembly (AWE-031) 26
    - 11.3 Equalizer Amplifier Assembly (W21-004) 32
    - 11.4 Control Amplifier Assembly (AWG-008) 35
    - 11.5 Power Amplifier Assembly (AWH-002) (AWH-013) 38
    - 11.6 Power Supply Circuit Assembly (AWR-029) 42
    - 11.7 Switch Circuit Assembly (AWS-013) 44
    - 11.8 Switch Circuit Assembly (AWS-014) 45
    - 11.9 CR & Meter Drive Assembly (AWM-050) 46

NOTE:

This SX-626 Service Manual applies to:

1) All the models with IC-indicated round label each attached above the power cords on the rear panels (see page 8); and
2) The following five models at which the respective sequence numbers begin:

KUW model . . . . . No. 3744801
KCW model . . . . . No. 3504201
FVZW model . . . . . No. 1612501
NBW model . . . . . No. 4301401
FW model . . . . . No. 1212001

1. SPECIFICATIONS

SEMICONDUCTORS

FETs	3
ICs	4
Transistors	27
Diodes	12

POWER AMPLIFIER SECTION

Music Power Output (IHF)	110Watts (4Ω) 76Watts (8Ω)
Continuous Power Output (each channel driven)	40W/40W (4Ω) 32W/32W (8Ω)
Continuous Power Output (both channels driven)	30W + 30W (4Ω) 27W + 27W (8Ω)
Power Output in the range of 20Hz to 20kHz (both channels driven)	20W + 20W (8Ω, Harmonic distortion less than 1%)
Harmonic Distortion	Less than 1% (Continuous power output) Less than 0.09% (16W/16W, 8Ω output)
Intermodulation Distortion	Less than 1% (Continuous power output) Less than 0.4% (16W/16W, 8Ω output)
Power Bandwidth (IHF)	10Hz to 70kHz (8Ω, Harmonic distortion less than 1%)
Frequency Response	5Hz to 80kHz, ± 1dB
Input Sensitivity/Impedance (1kHz, Continuous power output)	500mV/60kΩ (MAIN IN)
Speakers	4 to 16Ω
Damping Factor	40 (8Ω, 1kHz)

PREAMPLIFIER SECTION

Output Voltage	500mV (Rated output), 3V (Max.)
Harmonic Distortion	Less than 0.5%
Frequency Response	15Hz to 20kHz, ± 1 dB
Input Sensitivity/Impedance (1kHz, for rated output)	PHONO 1 2.5mV/45kΩ PHONO 2 2.5mV/45kΩ MIC 2.2mV/22kΩ AUX 200mV/100kΩ TAPE MONITOR 1, 2 200mV/70kΩ
Recording Output	TAPE REC 1, 2 (Pin jack) 200mV TAPE REC (DIN connector) 35mV
BASS Control	−11 dB, +11 dB/100Hz
TREBLE Control	−11 dB, +10.5 dB/10kHz
LOW Filter	−8dB/50Hz (6dB/oct.)
HIGH Filter	−9dB/10kHz (6dB/oct.)
Equalization Curve	PHONO: RIAA S.T.D.
Loudness Contour	+10dB/100Hz, +6dB/10kHz withVolume Control set at −40dB position.
Hum and Noise (IHF)	PHONO More than 85dB AUX More than 95dB

FM TUNER SECTION

Frequency Range	88MHz to 108MHz 87.5MHz to 108MHz (FTZ approved)
Usable Sensitivity (IHF)	2.0μV
Capture Ratio (IHF)	2.5dB
Selectivity (IHF)	More than 70dB
Image Rejection	More than 80dB (98MHz)
IF Rejection	More than 100dB (90MHz)
Spurious Rejection	More than 90dB (98MHz)
AM Suppression	50dB
Signal-to-Noise Ratio	70dB
Harmonic Distortion	Mono: Less than 0.4% (100% Mod.) Stereo: Less than 0.5% (100% Mod.)
Tuning Indicator	Signal strength type
Muting	Switchable to ON-OFF
Stereo Separation	More than 40dB (1kHz)
Sub Carrier Suppression	More than 50dB
De-emphasis Switch	50μ sec., 75μ sec. (FW model only)
Antenna Input	Impedance 300Ω balanced and 75Ω unbalanced.

AM TUNER SECTION

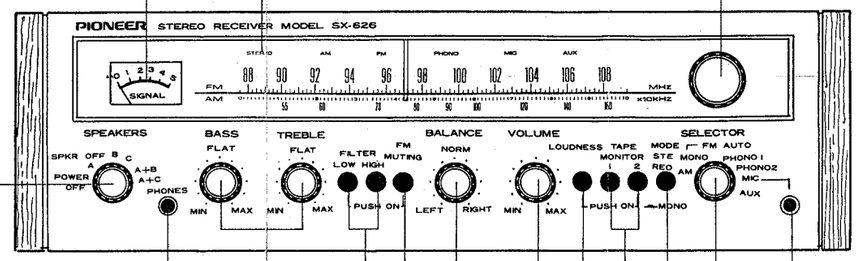
Frequency Range	525kHz to 1,605kHz
Usable Sensitivity (IHF)	10μV
Selectivity (IHF)	More than 30dB
Image Rejection	More than 80dB (1,000kHz)
IF Rejection	More than 70dB
Signal-to-Noise Ratio	More than 50dB
Antenna	Built-in, Ferrite Loopstick Antenna

MISCELLANEOUS

Power Requirements	120V 60Hz or 110V, 120V, 130V, 220V and 240V. (Switchable) 50 − 60Hz
Power Consumption	170W (Max.)
Dimensions (overall)	17-11/16in./450mm (width) 5-11/16in./145mm (height) 14-3/16in./360mm (depth)
Weight	Without package: 21lb. 13oz/9.9kg With package: 26lb. 7oz/12kg
Furnished Accessories	FM T-type Antenna 1 Pin Plugs 2 Speaker Plugs 6 Polishing cloth 1 Operating Instructions 1

NOTE: Specifications and the design subject to possible modification without notice due to improvements.

2. FRONT PANEL FACILITIES



SIGNAL METER
Meter for indicating receiving signal strength.

STEREO INDICATOR
This indicator will light up when the broadcast is in stereo.

TUNING KNOB
Used to select desired stations.

SPEAKERS SWITCH
A combination of the power on/off switch and the speaker system selector switch.

POWER OFF . ... The equipment is dead.
A ..... Sound comes through the speaker system plugged into the A speaker sockets.
SPKR OFF . . No sound comes from any speaker system. Useful for listening through headphones.
B ..... Sound comes through the speaker system plugged into the B speaker sockets.
C ..... Sound comes through the speaker system plugged into the C speaker sockets.
A + B ..... Both A and B speaker systems are energized.
A + C ..... Both A and C speaker systems are energized.

PHONES JACK
Use this to plug in stereo headphones.
A full selection of high-performance headphones is available from Pioneer.

BASS & TREBLE CONTROLS
Control bass and treble. Turning each control clockwise from the FLAT position will boost the tone, and turning it counterclockwise will diminish the tone.

FILTER SWITCHES
LOW: Setting this switch to ON will eliminate low frequency noises, such as record rumble, hum, or other interference. The switch is normally set to OFF unless the filter is required.

HIGH: Setting this switch to ON will eliminate high frequency noises, such as record scratch, hiss static noise from fluorescent lamps, or other interference. The switch is normally set to OFF unless the filter is required.

FM MUTING SWITCH
This switch is used to suppress much noise between FM stations while tuning.
In a fringe area, however, this switch should be kept off in order not to suppress the desired station signal at the same time.

BALANCE CONTROL
This control balances the volume of the left and right speaker systems. Where the volume from the right-hand speakers is too low, turn it to the right (clockwise). Where the volume from the left-hand speakers is too low, turn it to the left (counterclockwise).

VOLUME CONTROL
To increase the volume, turn it to the right (clockwise).

LOUDNESS SWITCH
To listen to quieter sound, set this to the ON position. This emphasizes the low and high notes. For normal listening, set it to the OFF position.

TAPE MONITOR SWITCHES (1 and 2)
These switches are set to ON for test-listening of recording in progress or playback of recorded tapes with tape decks.

1 — This switch is set to ON for using a tape deck plugged into TAPE 1 MON jacks and TAPE 1 REC jacks or TAPE REC/P.B. connector.
2 — This switch is set to ON for using a tape deck plugged into TAPE 2 MON jacks and TAPE 2 REC jacks.

NOTE: For a normal record playback or listening to broadcasts, leave these switches set to the OFF position. If the switches are set to ON, sound will not be produced from speakers.

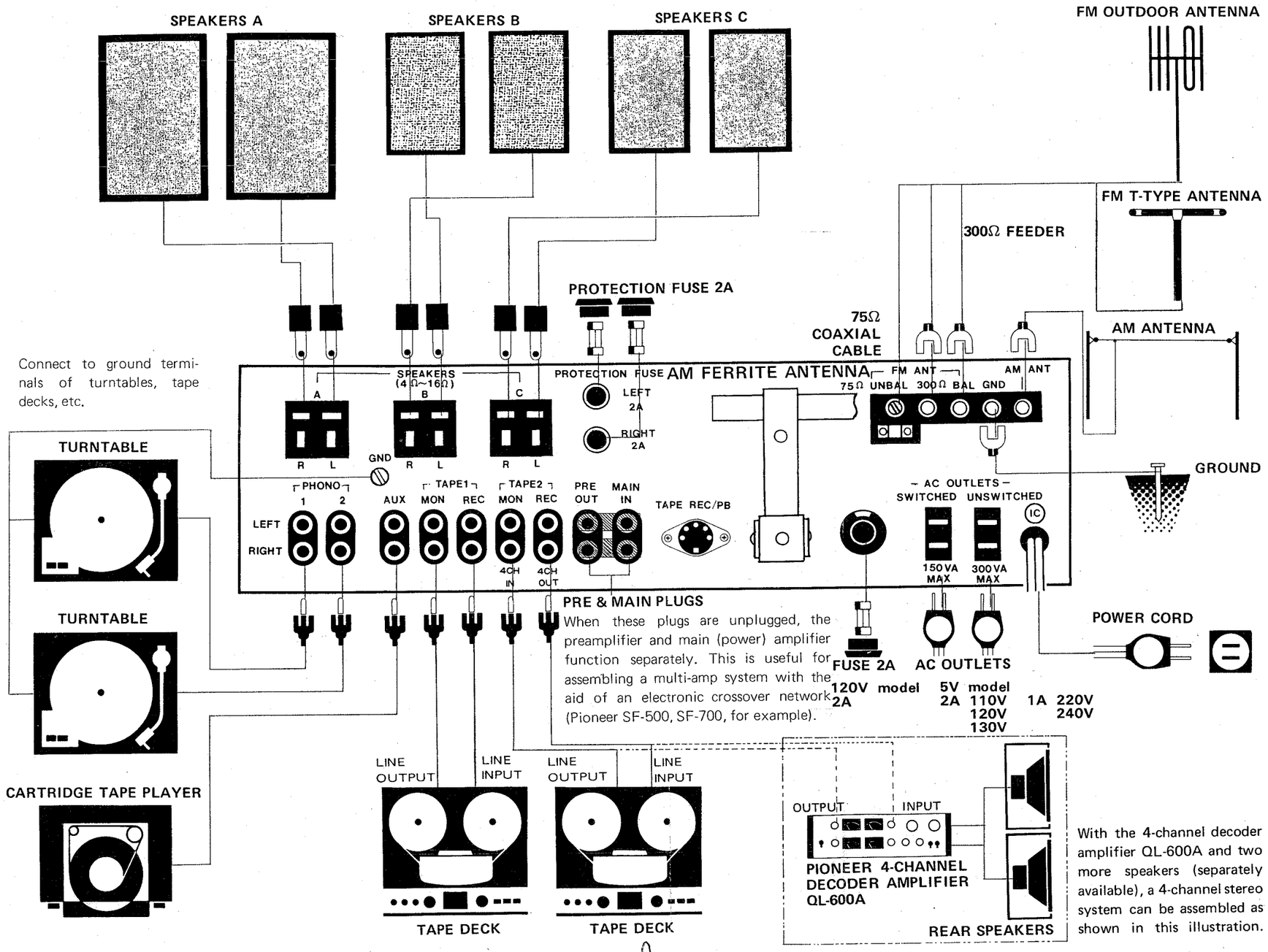
MIC JACK
Accepts the plug of the microphone. Use a high-impedance, dynamic microphone with a standard plug.

SELECTOR SWITCH
This switch is used for choosing the program source.

AM ..... AM reception.
FM MONO.. FM monophonic reception only.
FM AUTO .. FM reception by automatic switching for either stereo or monophonic program.
PHONO 1... For playing records on a turntable plugged into the PHONO 1 jacks.
PHONO 2... Same as above, for PHONO 2 jacks.
MIC ..... Microphone sound can be reproduced.
AUX ..... For playing signals fed to the AUX jacks.

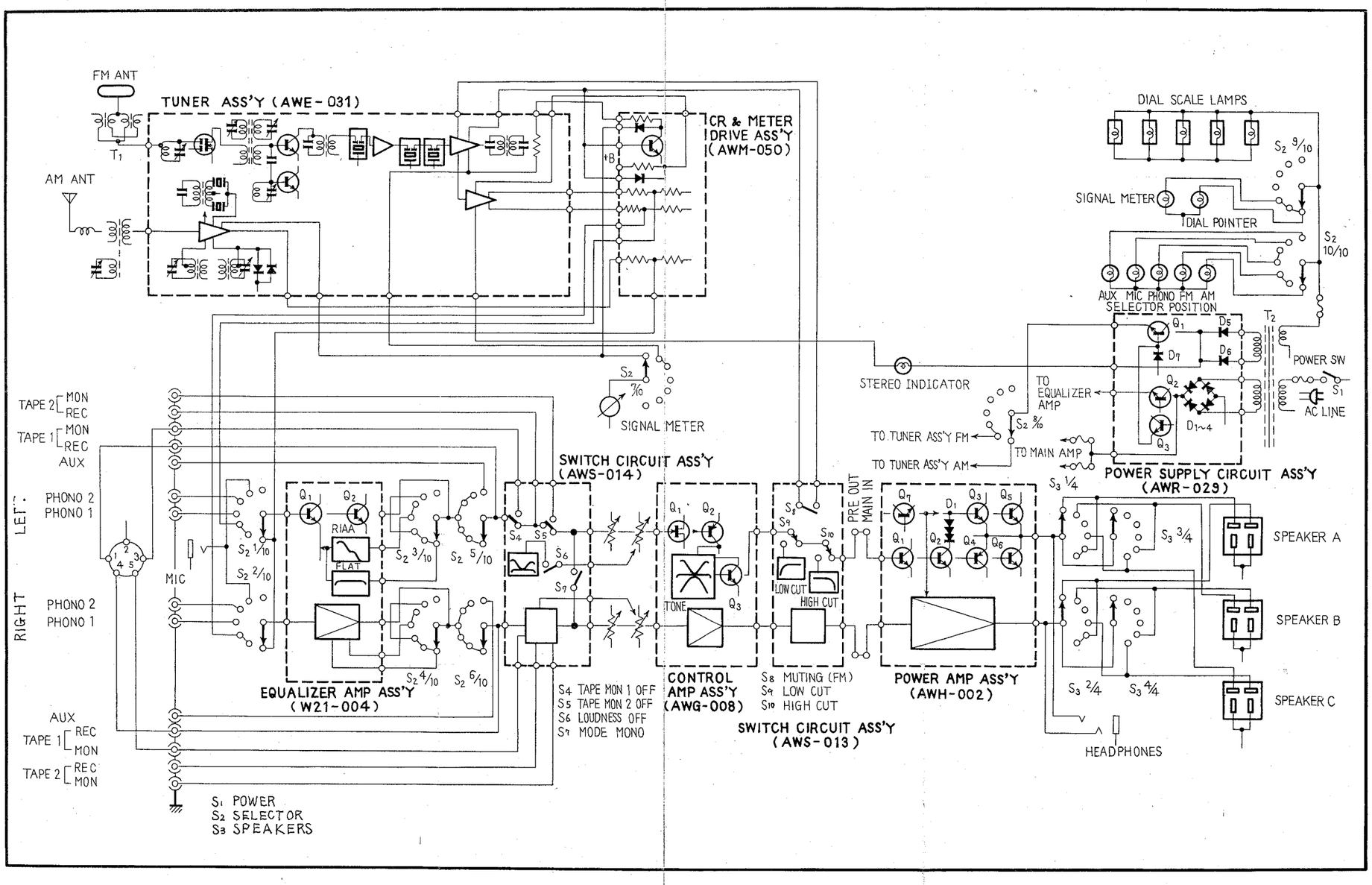
MODE SWITCH
STEREO: When set to STEREO, stereo sound is present.
MONO: When set to MONO, the left and right channel signals blend into monophonic sound.

3. CONNECTION DIAGRAM



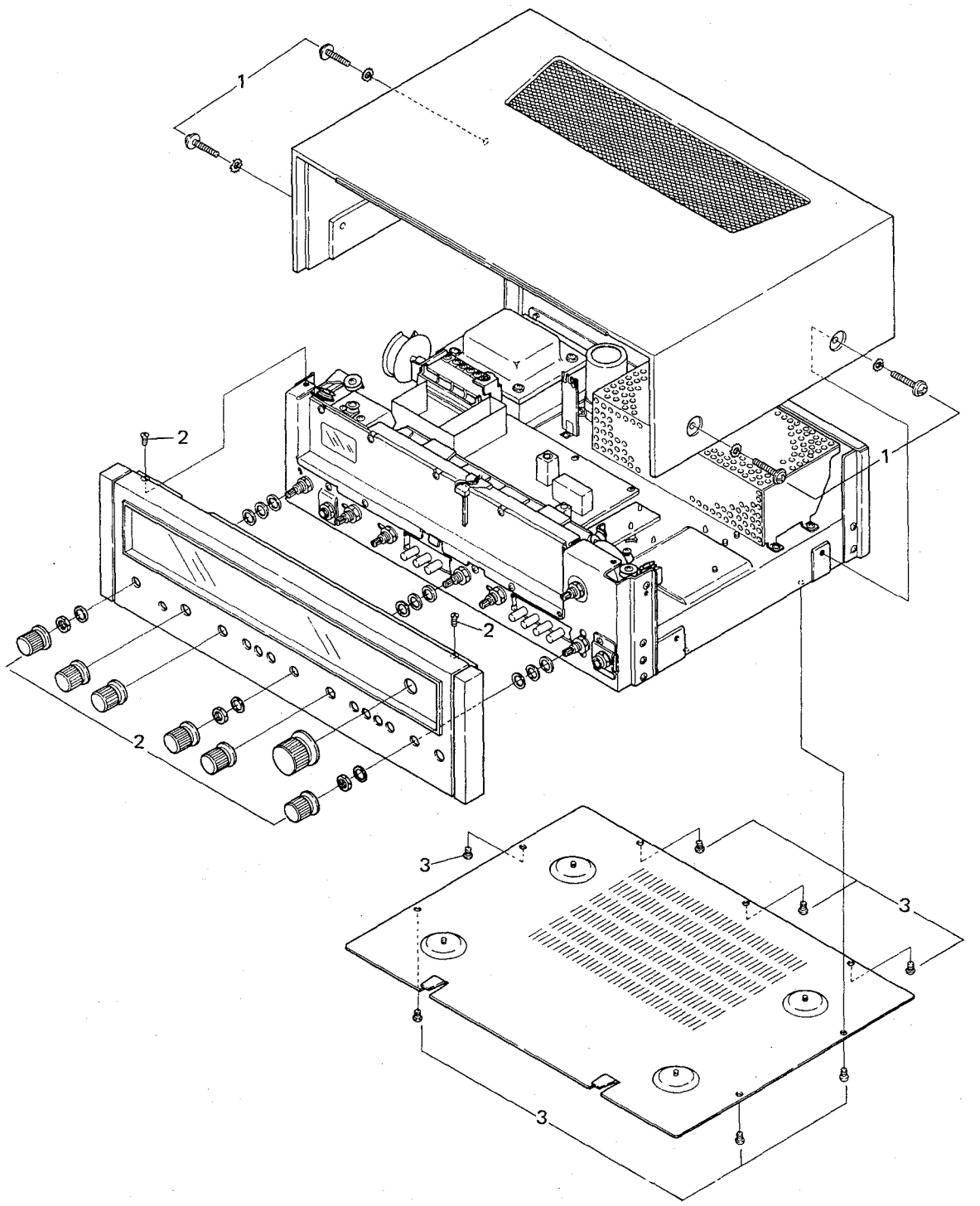
With the 4-channel decoder amplifier QL-600A and two more speakers (separately available), a 4-channel stereo system can be assembled as shown in this illustration.

4. BLOCK DIAGRAM



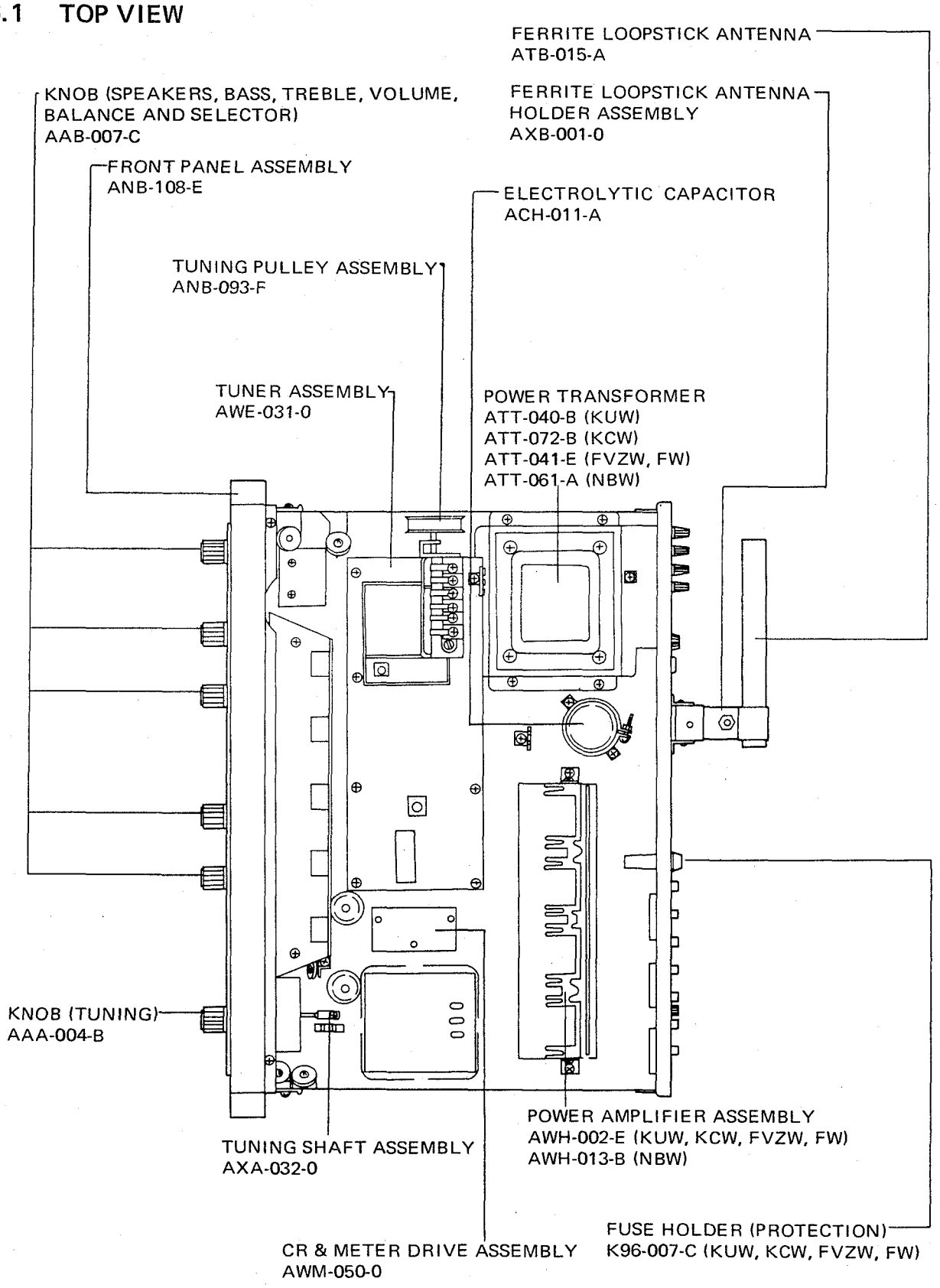
5. DISASSEMBLY

1. Remove 4 screws from the sides of the wooden case. Pull the case backward off from the receiver housing.
2. Pull off all knobs, then remove nuts and washers from shafts and remove 2 screws from top of front panel. The front panel can now be removed.
3. The bottom plate can be removed after loosening the 7 screws.

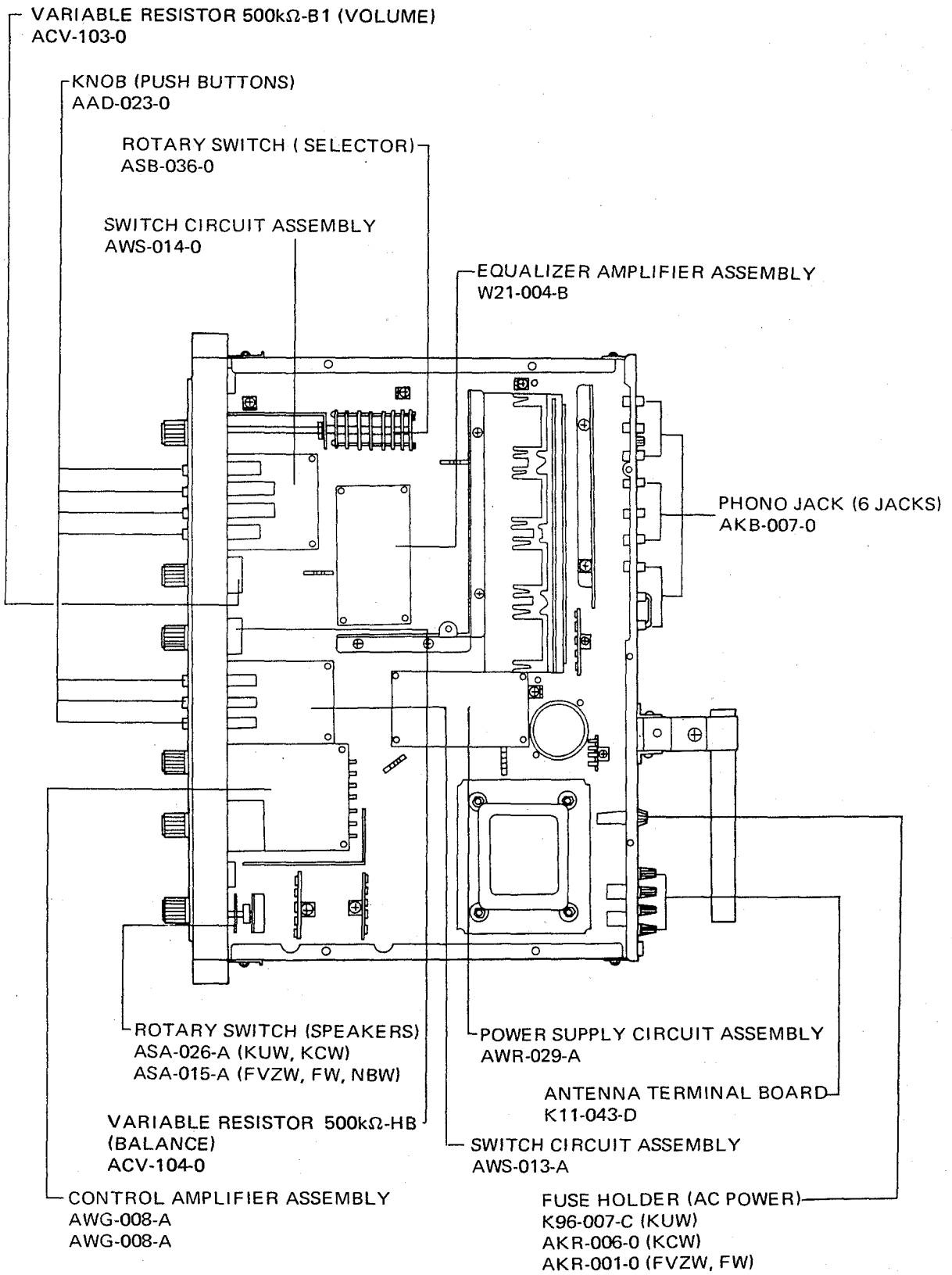


6. PARTS AND P.C. BOARD LOCATION

6.1 TOP VIEW



6.2 BOTTOM VIEW



7. ALIGNMENT PROCEDURE

7.1 REQUIRED MEASURING INSTRUMENTS

- FM signal generator
- MPX signal generator
- AM signal generator
- Voltmeter
- Oscilloscope
- Distortion meter

7.2 AM ADJUSTMENT

• Tracking

1. Set the AM signal generator for 400Hz modulation at 30%. Connect the generator output to the AM antenna terminal through a 1kΩ dummy.
2. Connect the oscilloscope and voltmeter in parallel to TAPE REC jack.
3. Set the signal generator output to approximately 30dB. Set signal generator and set dials to 600kHz.
4. Adjust cores of T9 and T10 (tuner assembly) and the bar antenna for peak output.
5. Set signal generator and set dials to 1,400kHz.
6. Adjust TC5, TC6 and TC7 (tuner assembly) for peak output.
7. Repeat steps (3) through (6) several times, to obtain optimum tracking.

7.3 FM ADJUSTMENT

• Tracking

1. Set the FM signal generator for 400Hz modulation at 100%.
   Connect generator output to the FM antenna terminals through a 300Ω balanced dummy antenna.
2. Connect the oscilloscope, voltmeter and distortion meter in parallel across TAPE REC jack.
3. Set the signal generator output level to 8~10dB.

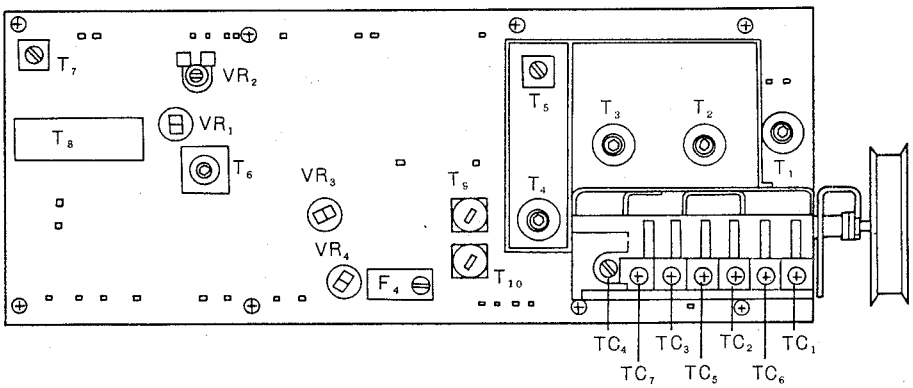
- KCW, KUW and NBW models:
  Set the signal generator and set dials to 90MHz.
- FW and FVZW models:
  Set the signal generator dial to 87.4MHz, and set dial to lower and (left side)

4. Adjust cores of T4 (tuner assembly) and T1, T2 and T3 to obtain peak output.
5. Set signal generator and set dials to 106MHz.
6. Adjust TC4 (tuner assembly) and TC1, TC2, and TC3 to obtain peak output.
7. Repeat steps (3) through (6) several times, to obtain optimum tracking.
8. Set the frequency to 90MHz and adjust the T5 core of the tuner assembly to obtain peak output.
9. Detune the set so that noise only is received. Adjust the primary (bottom) core of T6 so that 0V reading between terminals 6 and 7 on the tuner assembly.
10. Set signal generator and set dials to 98MHz. Set signal generator output level to 60dB. Carefully tune the set to this frequency.
11. Adjust the secondary (top) core of T6 (tuner assembly) for minimum distortion.

• FM MPX adjustment

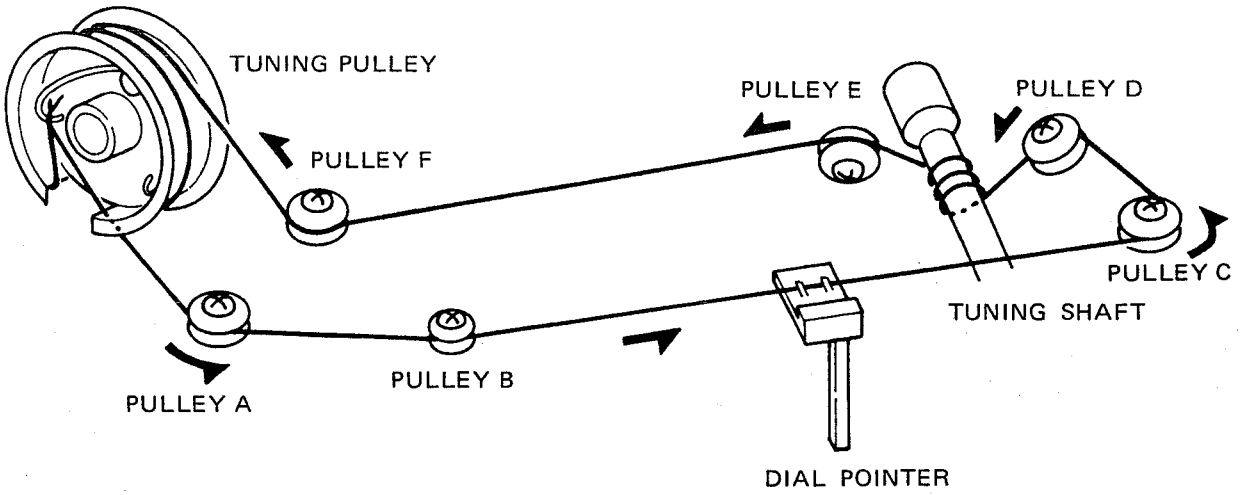
1. Set MPX signal generator modulation for the main signal (L+R) to 1kHz at 67.5kHz deviation and for the pilot (19kHz) at 7.5kHz deviation. Set the output level to 60dB.
2. Apply signal generator modulation to the left channel only.
   Adjust T8 (tuner assembly) for peak output.
3. Under this condition, adjust the core of T5 (tuner assembly) for minimum distortion.
4. Set signal generator modulation to the pilot and L(R).
   Adjust VR1 (tuner assembly) to obtain maximum channel separation.

TUNER ASSEMBLY

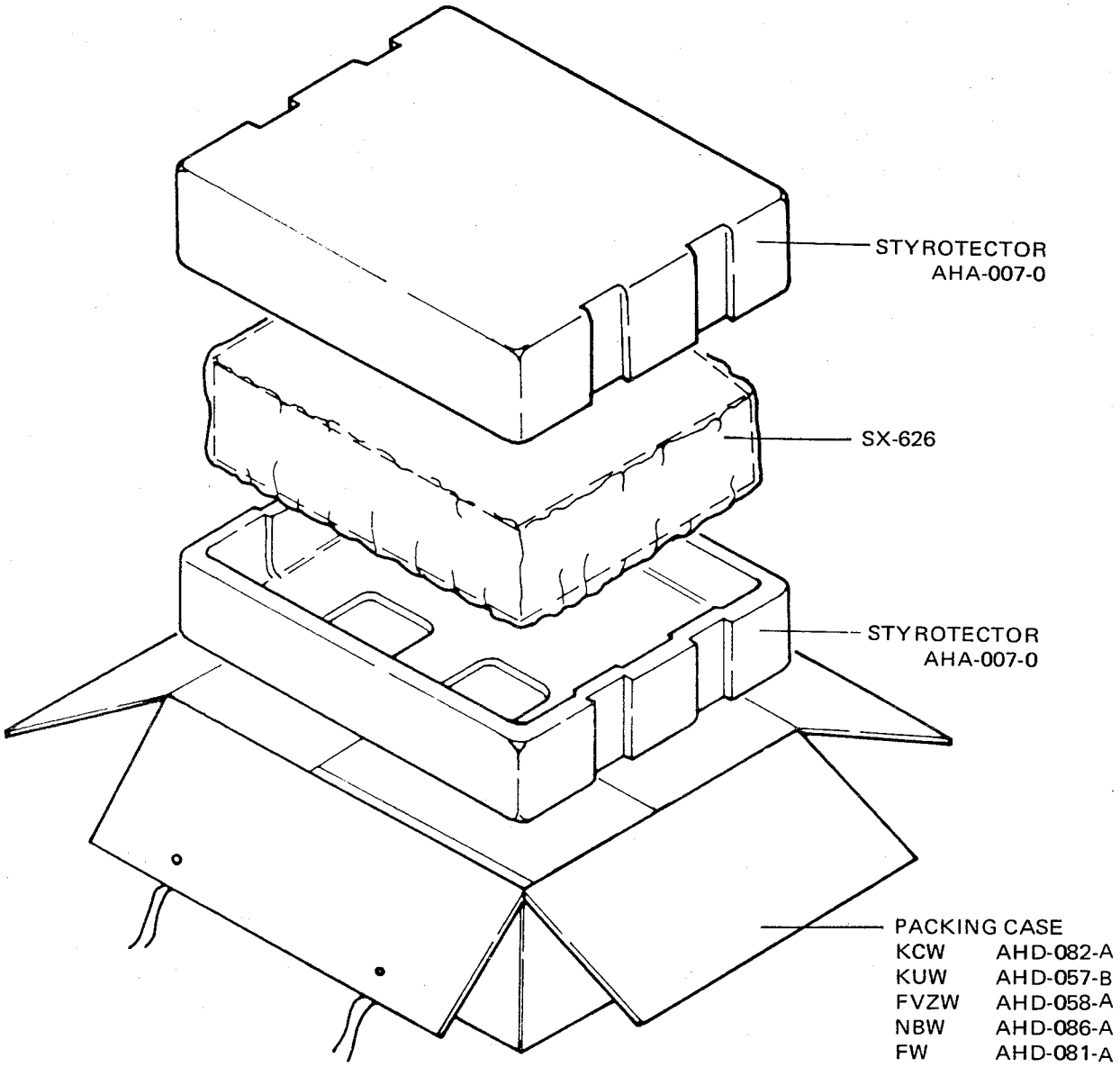


8. DIAL CORD STRINGING

a) Set the tuning capacitor to mimimum capacitance.
b) Tie one end of the string to tuning pulley.
c) Pull the string around the pulleys A, B, C and D, then wind 3 turns around the tuning
d) Lead the string around the pulleys E and F.
e) Finally, tie the end of the string to spring on the tuning pulley.
f) Tune receiver to low end. Fasten dial pointer to string so that it indicates low end on dial scale.



9. PACKING METHOD AND PART NUMBERS



10. EXPLODED VIEW AND PARTS LIST

Parts List of Exploded View

NOTICE: Any parts asterisked (*) are subject to being not supplied.

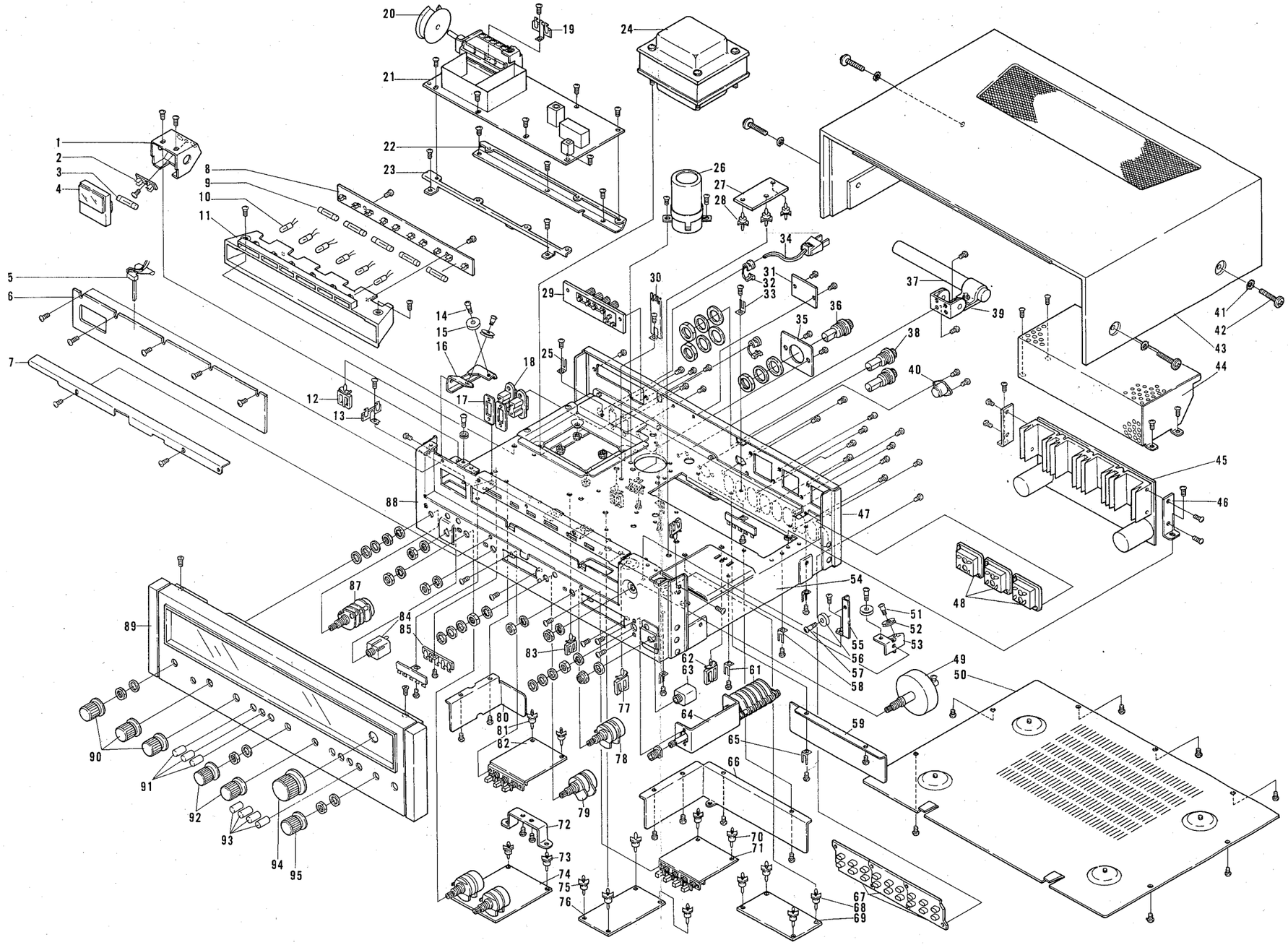
Key No.	Description	Part No.	
1*	Lamp cover	ANH-140-0	
2	Pilot lamp socket	K91-005-A	
3	Pilot lamp 8V, 0.3A (meter)	E22-017-0	
4	Signal meter	AAW-005-0	
5	Dial pointer assembly	AAF-007-C	
6	Dial scale	AAG-057-0	
7*	Dial scale-held metal	ANF-020-B	
8	Lamp board assembly	AWX-010-A	
9	Pilot lamp 8V, 0.3A (dial scale)	E22-017-0	
10	Pilot lamp 6V, 30mA (stereo indicator)	AEL-006-0	

Key No.	Description	Part No.	
11*	Lamp box	AEC-014-A	
12*	Wire clip	AEC-004-0	
13	Terminal strip (2P)	AKC-015-0	KUW
	Terminal strip (2P)	K13-043-A	KCW, FVZW, FW, NBW
14*	Pulley shaft	M49-025-E	
15*	Pulley	AEC-006-0	
16*	Pulley-held metal	ANG-091-0	
17	AC socket-held metal	M49-127-A	KUW, KCW, FVZW, FW
18	AC socket	AKP-002-0	KUW, KCW, FW
	AC socket	K82-012-A	FVZW
19	Terminal strip (1L2P)	AKC-018-0	
20	Tuning pulley assembly	AXA-015-A	
21	Tuner assembly	AWE-031-0	
22*	Sub-chassis-B	ANA-054-0	
23*	Sub-chassis-A	ANA-053-0	
24	Power transformer	ATT-040-B	KUW
	Power transformer	ATT-072-B	KCW
	Power transformer	ATT-041-E	FVZW, FW
	Power transformer	ATT-061-A	NBW
25	Ground terminal strip (2P)	K13-048-0	
26	Electrolytic capacitor 3,300μF, 63V	ACH-011-A	
27	CR & meter drive assembly	AWM-050-0	
28*	P.C. board holder	AEB-019-0	KUW
	P.C. board holder	B21-008-A	KCW, FW, FVZW, NNW
29	Antenna terminal board	K11-043-D	
30*	Wire holder	M45-105-C	
31*	Model name plate	AAL-047-A	KUW, KCW
	Model name plate	AAL-048-A	FW, FVZW
	Model name plate	ABL-069-0	NBW
32	AC cord grommet	AEC-079-0	
33	Ground terminal strip (2P)	K13-048-0	
34	AC power cord	D11-003-E	KUW, KCW
	AC power cord	D11-002-B	FW
	AC power cord	ADG-004-0	FVZW
	AC power cord	D54-019-0	NBW
35*	Adaptor (fuse holder)		KUW
36	Fuse holder (AC power)	K96-007-C	KUW
	Fuse holder (AC power)	AKR-006-0	KCW
	Fuse holder (AC power)	AKR-001-0	FVZW, FW
37	Ferrite loopstick antenna		
38	Fuse holder (Protection)	K96-007-C	KUW, KCW, FVZW, FW
39	Ferrite loopstick antenna holder assembly	AXB-001-0	
40	Connector (DIN type 5p)	K93-003-B	
41	Washer	B21-011-0	
42	Screw M4x15	ABA-010-A	
43	Wooden case	AMM-006-C	
44*	Cover (power amplifier)	ANH-131-0	
45	Power amplifier assembly	AWH-002-E	KUW, KCW, FVZW, FW
	Power amplifier-assembly	AWH-013-B	NBW
46	Power amplifier-held metal	ANF-017-0	
47*	Rear panel	ANC-032-E	KUW, KCW
	Rear panel	ANC-027-H	FVZW, FW
	Rear panel	ANC-042-D	NBW
48	Speaker output terminal	K72-028-0	
49	Tuning shaft assembly	AXA-032-0	
50*	Bottom plate	ANE-008-D	

NOTICE: Any parts asterisked (*) are subject to being not supplied.

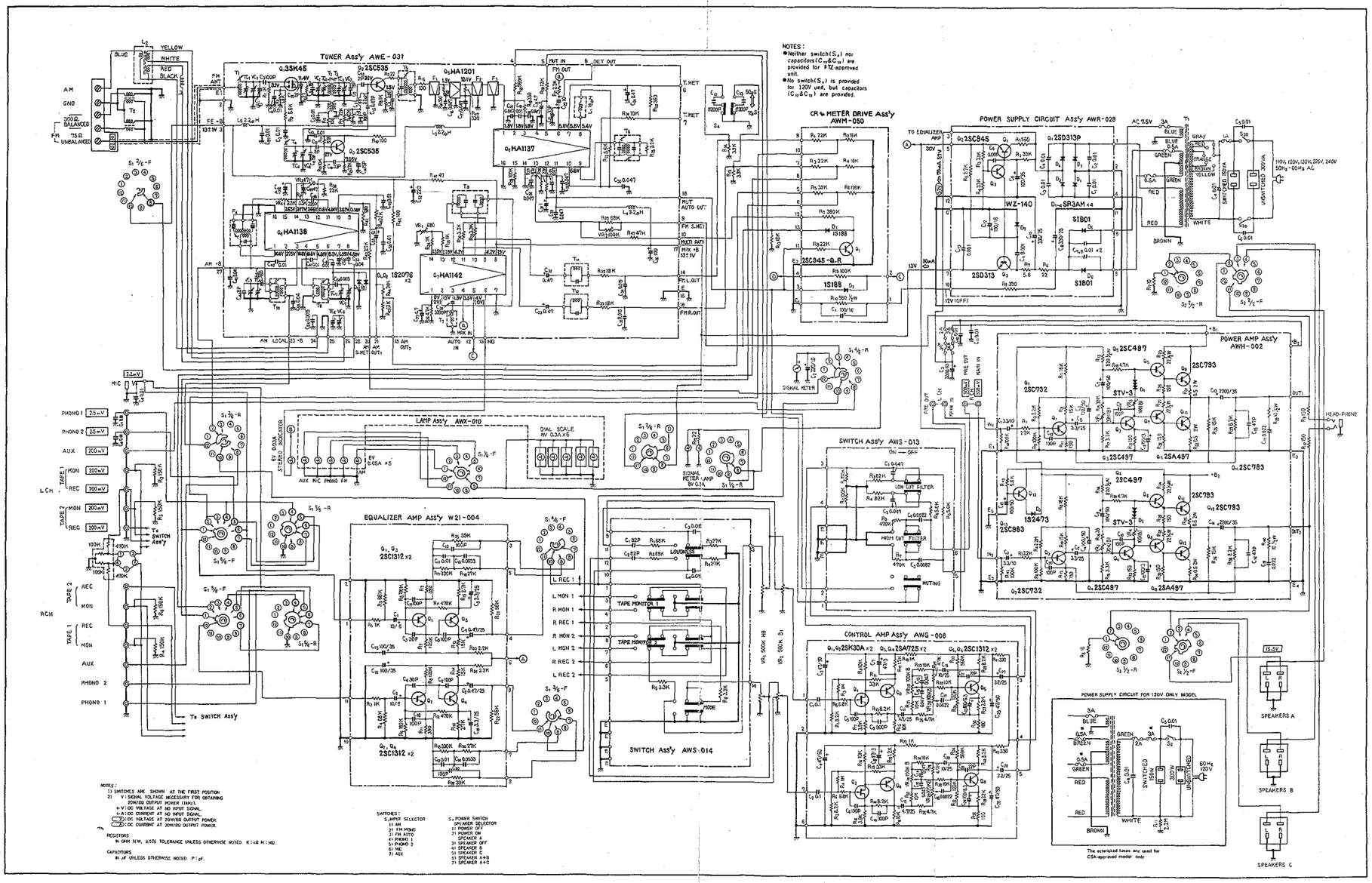
Key No.	Description	Part No.	
51*	Pully shaft	M49-025-E	
52*	Pulley	AEC-006-0	
53*	Pulley-held metal	ANG-091-0	
54*	Chassis	ANA-012-J	
55*	Pulley-held metal	ANG-091-0	
56*	Pulley	AEC-006-0	
57*	Pulley shaft	M49-025-E	
58	Ground terminal strip (2P)	K13-048-0	
59*	Shield plate (1)	ANH-044-A	
60			
61	Rotary switch	ASB-036-0	
62*	Wire clip	AEC-004-0	
63	Phone jack (Microphone)	K72-024-0	
64*	Switch-held metal	ANF-019-A	
65	Ground terminal strip (2P)	K13-048-0	
66*	Shield plate (2)	ANH-045-A	
67	Phone jack-A (6 jacks)	AKB-007-0	
68*	P.C. board holder	AEB-019-0	KUW
	P.C. board holder	B21-008-A	KCW, FW, FVZW, NBW
69	Equalizer amplifier assembly	W21-004-B	
70*	P.C. board holder	AEB-019-0	KUW
	P.C. board holder	B21-008-A	KCW, FW, FVZW, NBW
71	Switch assembly	AWS-014-0	
72*	Control amplifier-held metal	ANF-018-0	
73*	P.C. board holder	AEB-019-0	KUW
	P.C. board holder	B21-008-A	KCW, FW, FVZW, NBW
74	Control amplifier assembly	AWG-008-A	
75*	P.C. board holder	AEB-019-0	KUW
	P.C. board holder	B21-008-A	KCW, FW, FVZW, NBW
76	Power supply circuit assembly	AWR-029-A	
77*	Wire clip (B)	AEC-005-0	
78	Variable resistor 500k-B1 (Volume)	ACV-103-0	
79	Variable resistor 500k-HB (Balance)	ACV-104-0	
80*	Shield plate	ANH-139-A	
81*	P.C. board holder	AEB-019-0	KUW
	P.C. board holder	B21-008-A	KCW, FW, FVZW, NBW
82	Switch assembly	AWS-013-A	
83*	Wire clip (B)	AEC-005-0	
84	Phone jack (Headphones)	K72-026-0	
85	Terminal strip (1L4P)	K13-026-A	KUW, KCW, FVZW
86			
87	Rotary switch (Speakers)	ASA-026-A	KUW, KCW
	Rotary switch (Speakers)	ASA-015-A	FW, FVZW, NBW
88*	Sub-panel assembly	AND-016-H	
89	Front panel assembly	ANB-108-E	
90	Knob (Speakers, Bass, Treble)	AAB-007-C	
91	Knob (push switch)	AAD-023-0	
92	Knob (Balance, Volume)	AAB-007-C	
93	Knob (push switch)	AAD-023-0	
94	Knob (Tuning)	AAA-004-B	
95	Knob (Selector)	AAB-007-C	

Exploded View



11. SCHEMATIC DIAGRAMS, P.C. BOARD PATTERNS AND PARTS LIST

11.1 CIRCUIT CONNECTION DIAGRAM AND MISCELLANEOUS PARTS



Miscellaneous Parts

- CAPACITORS: IN μF UNLESS OTHERWISE NOTED p: pF
- RESISTORS: IN Ω, ¼W UNLESS OTHERWISE NOTED k: kΩ, M: MΩ

CAPACITORS

Symbol	Description			Part No.	
C2	Electrolytic	220	10V	CEB 221P 10	
C3	Electrolytic	3,300	63V	ACH-011-A	
C4	Metallized mylar	0.01	800V	ACE-002-0	KUW
	Ceramic	0.01	250V	ACG-003-0	KCW
	Ceramic	0.01	250V	ACG-001-0	FVZW, FW
C5	Ceramic	0.01	250V	ACG-001-0	KUW, FVZW, FW
	Ceramic	0.01	150V	ACG-002-0	KCW
C6	Ceramic	0.01	250V	ACG-001-0	FVZW, FW
C7	Ceramic	0.01	50V	CKDYF 103Z 50	
C8	Ceramic	0.01	50V	CKDYF 103Z 50	
C9	Ceramic	0.01	50V	CKDYF 103Z 50	
C10	Ceramic	0.01	150V	ACG-002-0	KCW, KUW
	Ceramic	0.01	250V	ACG-001-0	FVZW, FW, NBW
C11	Ceramic	0.01	150V	ACG-002-0	KCW, KUW
	Ceramic	0.01	250V	ACG-001-0	FVZW, FW, NBW
C12	Mylar	0.0082	50V	CQMA 822J 50	KUW, KCW, FW
C13	Mylar	0.0082	50V	CQMA 822J 50	KUW, KCW, FW

RESISTORS

Symbol	Description			Part No.	
R3	Carbon film	150k		RD¼PS 154J	
R4	Carbon film	150k		RD¼PS 154J	
R5	Carbon film	150k		RD¼PS 154J	
R6	Carbon film	150k		RD¼PS 154J	
R7	Wire wound	10	5W	RT5B 100K	
R8	Wire wound	10	5W	RT5B 100K	
R9	Wire wound	150	3W	RT3B 151K	
R10	Wire wound	150	3W	RT3B 151K	
R11	Carbon film	2.2M	½W	RD½PW 225J	KUW, KCW
R12	Carbon film	22	½W	RD½PS 220J	
R13	Carbon film	18k		RD¼PS 183J	
R14	Carbon film	3.9k		RD¼PS 392J	
R15	Carbon film	3.9k		RD¼PS 392J	
R16	Carbon film	1M		RD½PS 105J	KUW, KCW
VR1	Variable resistor	500k-HB	(Balance)	ACV-104-0	
VR2	Variable resistor	500k-B1	(Volume)	ACV-103-0	

COIL AND TRANSFORMERS

Symbol	Description	Part No.	
L1	RF choke coil	T24-028-A	
L2	Ferrite loopstick antenna	ATB-015-A	
T1	Power transformer	ATT-040-B	KUW
	Power transformer	ATT-072-B	KCW
	Power transformer	ATT-041-E	FVZW, FW
	Power transformer	ATT-061-A	NBW
T2	Balun	T22-025-A	

Continued on the next page

SWITCHES

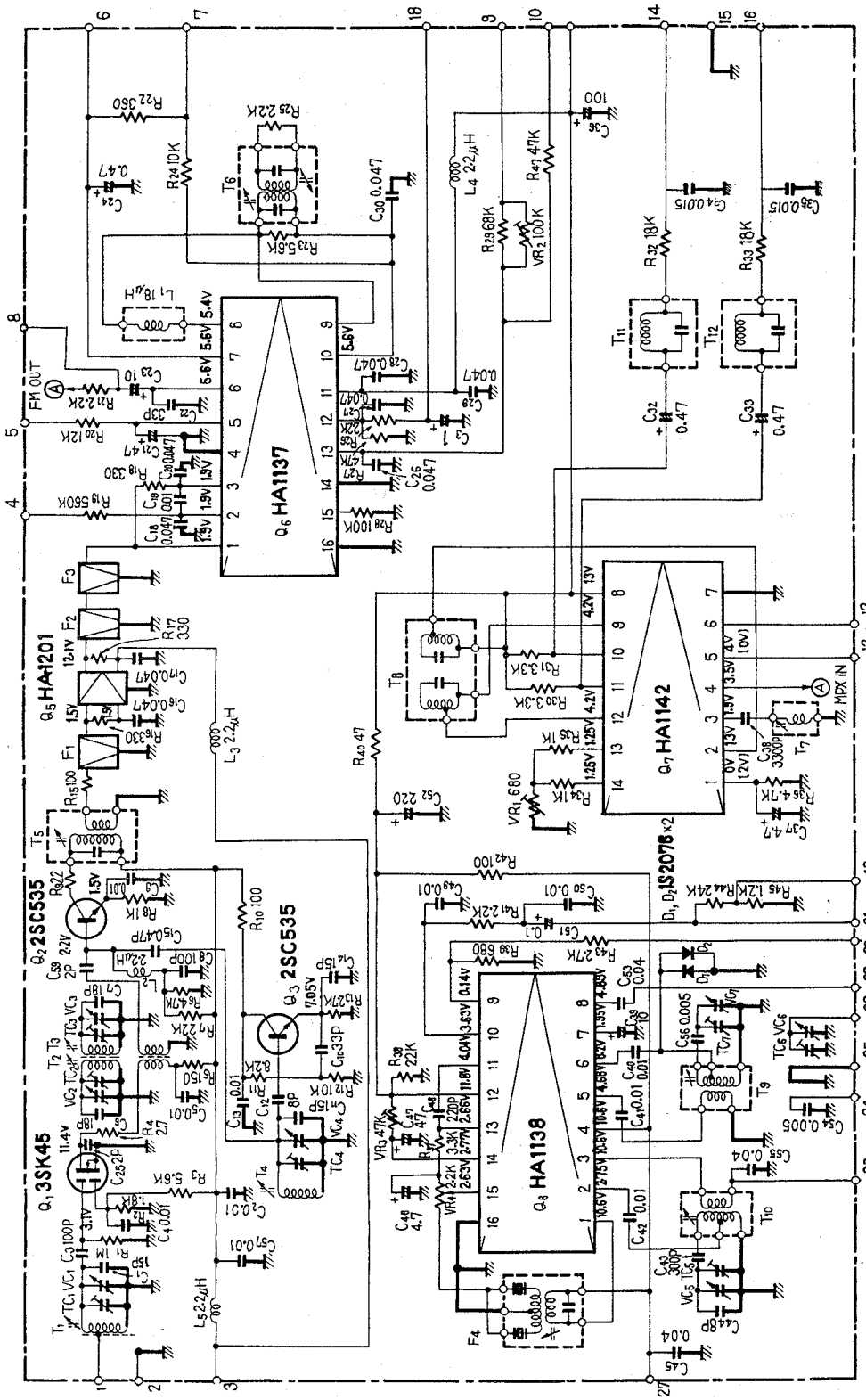
Symbol	Description	Part No.	
S1	Rotary switch (Selector)	ASB-036-0	
S2	Rotary switch (Speakers)	ASA-026-A	KUW, KCW
	Rotary switch (Speakers)	ASA-015-A	FVZW, FW, NBW
S3	Slide switch (De-emphasis)	S41-022-A	FW

OTHERS

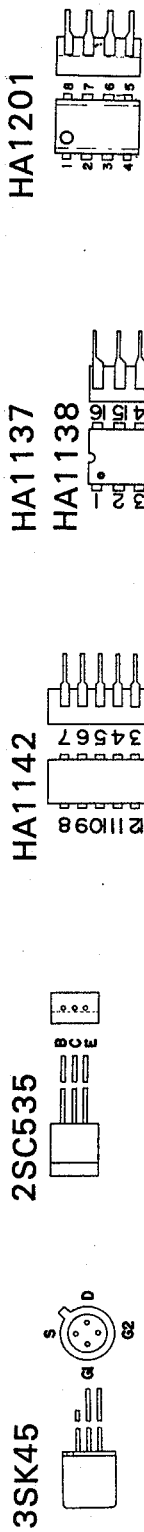
Symbol	Description	Part No.	
	Tuner assembly	AWE-031-0	
	Equalizer amplifier assembly	W21-004-B	
	Control amplifier assembly	AWG-008-A	
	Power amplifier assembly	AWH-002-E	KUW, KCW, FVZW, FW
	Power amplifier assembly	AWH-013-B	NBW
	Switch circuit assembly	AWS-013-A	
	Switch circuit assembly	AWS-014-0	
	CR & meter drive assembly	AWM-050-0	
	Power supply circuit assembly	AWR-029-A	
	Lamp board assembly	AWX-010-A	
	Front panel assembly	ANB-108-E	
	Wooden case	AMM-006-C	
	Dial pointer assembly	AAF-007-C	
	Signal meter	AAW-005-0	
	Knob (push bottons)	AAD-023-0	
	Knob (Speakers, Bass, Treble, Volume, Balance and Selector)	AAB-007-C	
	Knob (Tuning)	AAA-004-B	
	Dial scale	AAG-057-0	
	Phono jack-A (6 jacks)	AKB-007-0	
	Antenna terminal board	K11-043-D	
	Jumper plug (for phono jack)	AKM-005-0	
	Pilot lamp 8V, 50mA (program indicator)	AEL-007-0	
	Pilot lamp 8V, 0.3A (dial scale)	E22-017-0	
	Pilot lamp 6V, 30mA (Stereo indicator)	AEL-006-0	
	Fuse 2A (AC power)	E21-027-0	KUW, KCW
	Fuse 1A (AC power)	E21-004-0	FVZW, FW
	Fuse 3A (protection)	AEK-008-0	KUW, KCW
	Fuse 2A (protection)	E21-035-A	KUW, KCW
	Fuse 3A (protection)	E21-022-0	KCW, FVZW, FW
	Fuse A (protection)	E21-019-A	KCW, FVZW, FW
	Fuse 2A (protection)	E21-029-A	NBW
	Fuse 0.5A (protection)	AEK-014-0	NBW
	Fuse 1A (protection)	E21-031-0	NBW
	Fuse 5A (protection)	AEK-015-0	NBW
	Compound part for REC jack	W52-004-0	
	AC socket	AKP-002-0	KUW, KCW, FW
	AC socket	K82-012-A	FVZW
	Speaker output terminal	K72-028-0	
	Phone jack (Headphones)	K72-026-0	
	Phone jack (Microphone)	K72-024-0	
	Fuse holder	K92-005-A	

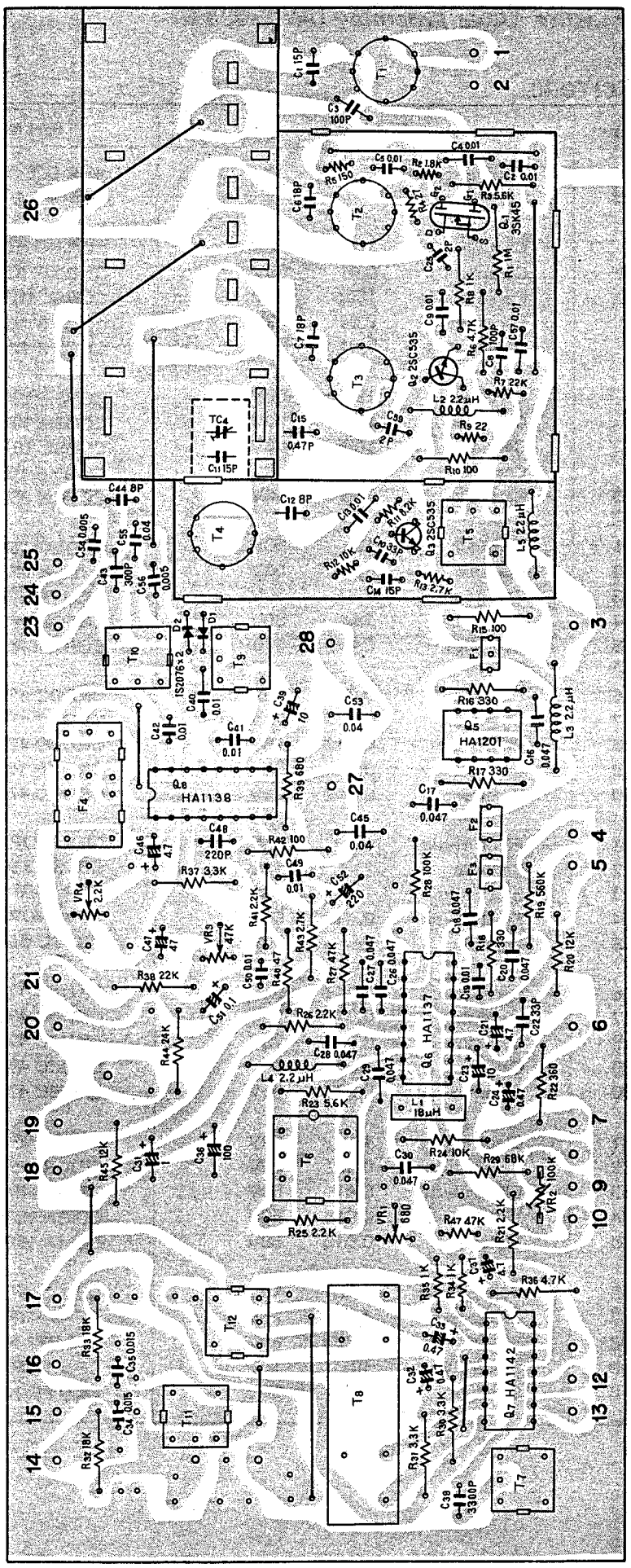
Symbol	Description	Part No.	
	Connector (DIN type 5P)	K93-003-B	
	Fuse holder (AC power and Protection)	K96-007-C	KUW, KCW, FVZW, FW
	Fuse holder (AC power)	AKR-006-0	KCW
	Fuse holder (AC power)	AKR-001-0	FVZW, FW
	Fuse holder (Protection)	K91-008-0	NBW
	FM T-type antenna	D52-013-0	
	Fuse 2A (AC power)	E21-005-0	FVZW, FW
	Speaker plug	K72-007-B	KUW, FVZW, FW, NBW
	Polishing cloth	E33-009-B	
	Packing case	AHD-057-B	KUW
	Packing case	AHD-082-A	KCW
	Packing case	AHD-058-A	FVZW
	Packing case	AHD-081-A	FW
	Packing case	AHD-086-A	NBW
	AC power cord	D11-003-E	KUW, KCW
	AC power cord	ADG-004-0	FVZW
	AC power cord	D11-002-B	FW
	AC power cord	D54-019-0	NBW
	Operating instructions	ARB-044-E	KUW, KCW, FVZW, FW
	Operating instructions	ARB-053-A	NBW
	Binding post (for ground)	B11-012-A	

11.2 TUNER ASSEMBLY (AWE-031-0)



Foil Side





Parts List of Tuner Assembly (AWE-031-0)

CAPACITORS

Symbol	Description			Part No.	
VC	Tuning capacitor			ACK-006-0	
TC4	Ceramic trimmer			C43-007-A	
C1	Ceramic	15p	50V	CCDSH 150K 50	
C2	Ceramic	0.01	50V	CKDYF 103Z 50	
C3	Ceramic	100p	50V	CCDSL 101K 50	
C4	Ceramic	0.01	50V	CKDYF 103Z 50	
C5	Ceramic	0.01	50V	CKDYF 103Z 50	
C6	Ceramic	18p	50V	CCDSH 180K 50	
C7	Ceramic	18p	50V	CCDSH 180K 50	
C8	Ceramic	100p	50V	CCDSL 101K 50	
C9	Ceramic	0.01	50V	CKDYF 103Z 50	
C10	Ceramic	33p	50V	CCDCH 330K 50	
C11	Ceramic	15p	50V	CCDLH 150K 50	
C12	Ceramic	8p	50V	CCDCH 080F 50	
C13	Ceramic	0.01	50V	CKDYB 103K 50	
C14	Ceramic	15p	50V	CCDCH 150K 50	
C15	Ceramic	0.47p	500V	CGB R47K 500	
C16	Ceramic	0.047	25V	CKDBC 473Z 25	
C17	Ceramic	0.047	25V	CKDBC 473Z 25	
C18	Ceramic	0.047	25V	CKDBC 473Z 25	
C19	Ceramic	0.01	50V	CKDYF 103Z 50	
C20	Ceramic	0.047	25V	CKDBC 473Z 25	
C21	Electrolytic	4.7	25V	CEA 4R7P 25	
C22	Ceramic	33p	50V	CCDSL 330K 50	
C23	Electrolytic	10	16V	CEA 100P 16	
C24	Electrolytic	0.47	50V	CEA R47P 50	
C25	Ceramic	2p	50V	CCDSL 020C 50	
C26	Ceramic	0.047	25V	CKDBC 473Z 25	
C27	Ceramic	0.047	25V	CKDBC 473Z 25	
C28	Ceramic	0.047	25V	CKDBC 473Z 25	
C29	Ceramic	0.047	25V	CKDBC 473Z 25	
C30	Ceramic	0.047	25V	CKDBC 473Z 25	
C31	Electrolytic	1	50V	CEA 010P 50	
C32	Electrolytic	0.47	50V	CEA R47P 50	
C33	Electrolytic	0.47	50V	CEA R47P 50	
C34	Mylar	0.015	50V	CQMA 153J 50	
C35	Mylar	0.015	50V	CQMA 153J 50	
C36	Electrolytic	100	16V	CEA 101P 16	
C37	Electrolytic	4.7	25V	CEA 4R7P 25	
C38	Styrol	0.0033	50V	C15-011-A	
C39	Electrolytic	10	16V	CEA 100P 16	
C40	Ceramic	0.01	50V	CKDYF 103Z 50	

Symbol	Description			Part No.	
C41	Ceramic	0.01	50V	CKDYF 103Z 50	
C42	Mylar	0.01	50V	CQMA 103K 50	
C43	Styrol	300p	50V	CQSA 301J 50	
C44	Ceramic	8p	50V	CCDXL 080F 50	
C45	Ceramic	0.04	50V	CKDYF 403Z 50	
C46	Electrolytic	4.7	25V	CEA 4R7P 25	
C47	Electrolytic	47	6V	CEA 470P 6	
C48	Ceramic	220p	50V	CCDSL 221K 50	
C49	Mylar	0.01	50V	CQMA 103K 50	
C50	Mylar	0.01	50V	CQMA 103K 50	
C51	Electrolytic	0.1	25V	CSSA 0R1M 25	
C52	Electrolytic	220	16V	CEA 221P 16	
C53	Ceramic	0.04	50V	CKDY 403Z 50	
C54	Ceramic	0.005	50V	CKDYF 502Z 50	
C55	Ceramic	0.04	50V	CKDYF 403Z 50	
C56	Ceramic	0.005	50V	CKDYF 502Z 50	
C57	Ceramic	0.01	50V	CKDYF 103Z 50	
C58	Ceramic	2p	50V	CCDSL 020C 50	

RESISTORS

Symbol	Description		Part No.	
VR1	Variable resistor	680-B	ACP-013-0	
VR2	Variable resistor	100k-B	ACP-021-0	
VR3	Variable resistor	47k-B	C92-048-0	
VR4	Variable resistor	2.2k-B	ACP-001-0	
R1	Carbon film	1M	RD¼PS 105J	
R2	Carbon film	1.8k	RD¼VS 182J	
R3	Carbon film	5.6k	RD¼PS 562J	
R4	Carbon film	27	RD¼VS 270J	
R5	Carbon film	150	RD¼VS 151J	
R6	Carbon film	4.7k	RD¼PS 472J	
R7	Carbon film	22k	RD¼VS 223J	
R8	Carbon film	1k	RD¼PS 102J	
R9	Carbon film	22	RD¼VS 220J	
R10	Carbon film	100	RD¼PS 101J	
R11	Carbon film	8.2k	RD¼VS 822J	
R12	Carbon film	10k	RD¼VS 103J	
R13	Carbon film	2.7k	RD¼VS 272J	
R14				
R15	Carbon film	100	RD¼PS 101J	
R16	Carbon film	330	RD¼PS 331J	
R17	Carbon film	330	RD¼PS 331J	
R18	Carbon film	330	RD¼PS 331J	
R19	Carbon film	560k	RD¼PS 564J	
R20	Carbon film	12k	RD¼PS 123J	

Continuted on the next page

Symbol	Description		Part No.	
R21	Carbon film	2.2k	RD¼PS 222J	
R22	Carbon film	360	RD¼PS 361J	
R23	Carbon film	5.6k	RD¼PS 562J	
R24	Carbon film	10k	RD¼PS 103J	
R25	Carbon film	2.2k	RD¼PS 222J	
R26	Carbon film	2.2k	RD¼RS 222J	
R27	Carbon film	47k	RD¼PS 473J	
R28	Carbon film	100k	RD¼PS 104J	
R29	Carbon film	68k	RD¼PS 683J	
R30	Carbon film	3.3k	RD¼PS 332J	
R31	Carbon film	3.3k	RD¼PS 332J	
R32	Carbon film	18k	RD¼PS 183J	
R33	Carbon film	18k	RD¼PS 183J	
R34	Carbon film	1k	RD¼VS 102J	
R35	Carbon film	1k	RD¼VS 102J	
R36	Carbon film	4.7k	RD¼PS 472J	
R37	Carbon film	3.3k	RD¼PS 332J	
R38	Carbon film	22k	RD¼PS 223J	
R39	Carbon film	680	RD¼PS 681J	
R40	Carbon film	47	RD¼PS 470J	
R41	Carbon film	2.2k	RD¼PS 222J	
R42	Carbon film	100	RD¼PS 101J	
R43	Carbon film	2.7k	RD¼PS 272J	
R44	Carbon film	24k	RD¼PS 243J	
R45	Carbon film	1.2k	RD¼PS 122J	
R46				
R47	Carbon film	47k	RD¼VS 473J	

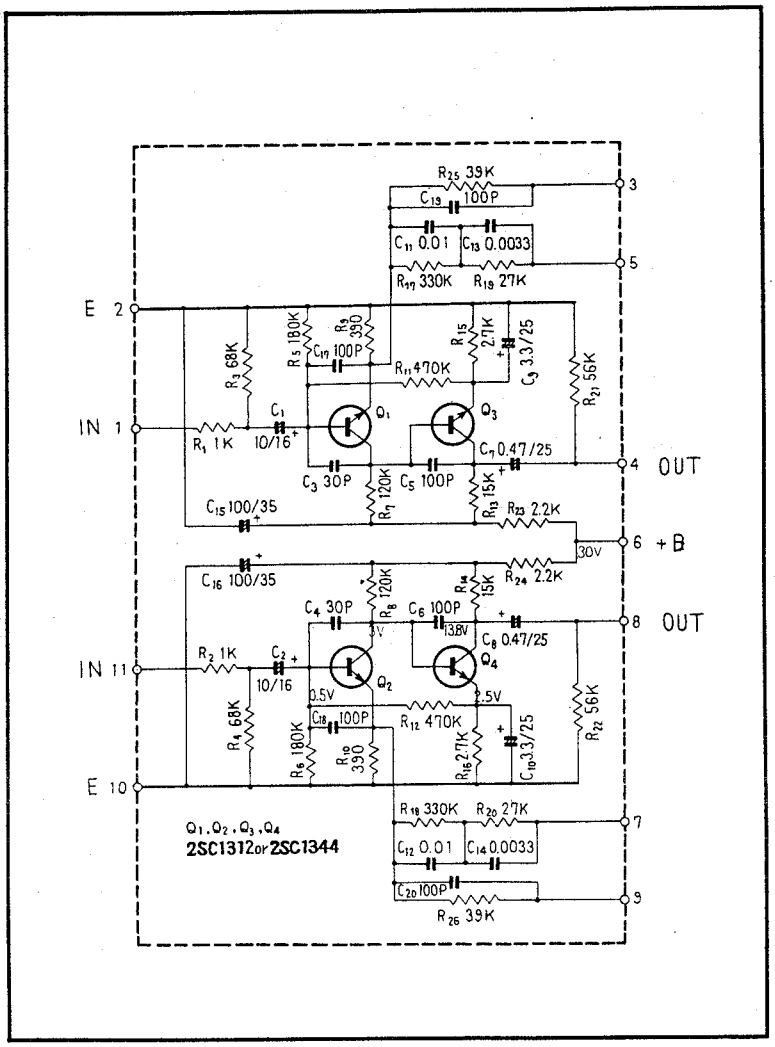
SEMICONDUCTORS

Symbol	Description		Part No.	
Q1	FET	3SK45-B		
Q2	Transistor	2SC535-B or A		
Q3	Transistor	2SC535-B		
Q5	IC	HA1201		
Q6	IC	HA1137		
Q7	IC	HA1142		
Q8	IC	HA1138		
D1	Diode	1S2076		
D2	Diode	1S2076		

COILS, TRANSFORMERS AND FILTERS

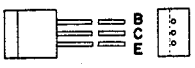
Symbol	Description	Part No.	
T1	FM antenna coil	ATC-021-0	
T2	FM RF coil	ATC-015-0	
T3	FM RF coil	ATC-016-0	
T4	FM oscillator coil	ATC-022-0	
T5	FM matching transformer	ATE-008-0	
T6	FM IF transformer	T73-035-A	
T7	19kHz transformer	T75-023-B	
T8	MPX transformer	ATM-011-0	
T9	AM RF coil	ATB-014-0	
T10	AM oscillator coil	ATB-013-0	
T11	38kHz filter	ATM-004-0	
T12	38kHz filter	ATM-004-0	
F1	FM ceramic filter	ATF-013-B	
F2	FM ceramic filter	ATF-013-B	
F3	FM ceramic filter	ATF-013-B	
F4	AM ceramic filter	ATF-009-0	
L1	Choke coil	ATH-007-0	
L2	RF choke coil	T24-028-A	
L3	RF choke coil	T24-028-A	
L4	RF choke coil	T24-028-A	
L5	RF choke coil	T24-028-A	

11.3 EQUALIZER AMPLIFIER ASSEMBLY (W21-004-B)

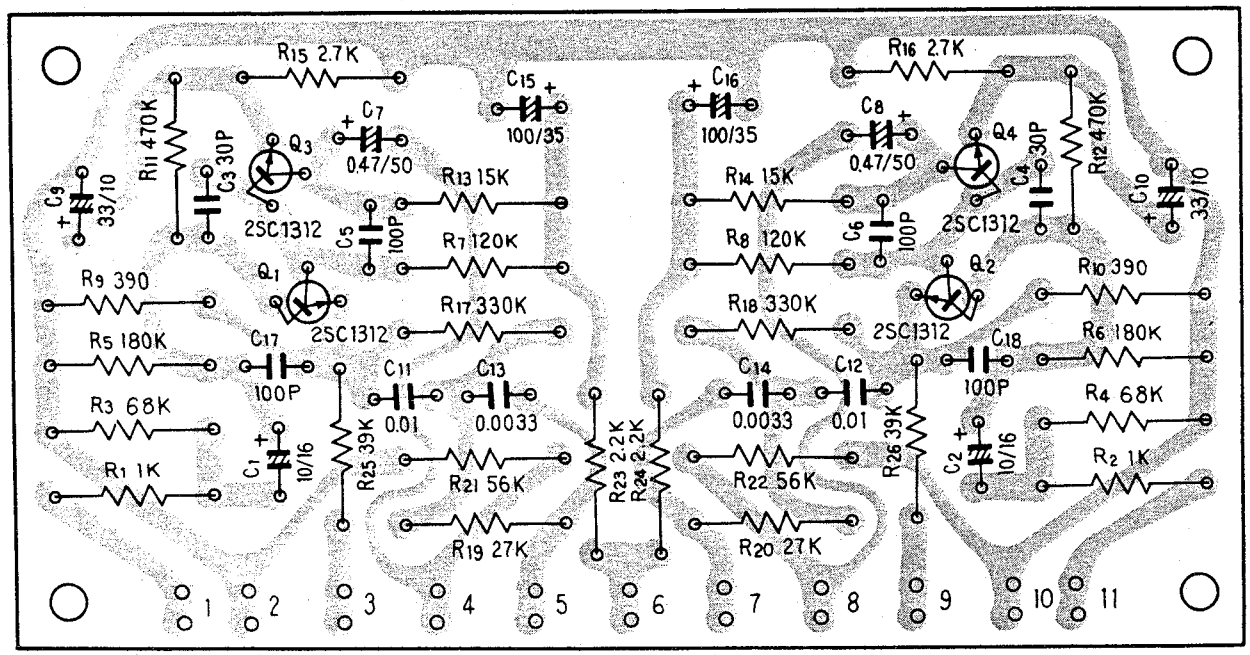


2SC1312

2SC1344



Foil Side



Parts List of Equalizer Amplifier Assembly (W21-004-B)

CAPACITORS

Symbol	Description			Part No.			
C1	Electrolytic	10	16V	CEA	100P	16	
C2	Electrolytic	10	16V	CEA	100P	16	
C3	Ceramic	30p	50V	CCDSL	300K	50	
C4	Ceramic	30p	50V	CCDSL	300K	50	
C5	Ceramic	100p	50V	CCDSL	101K	50	
C6	Ceramic	100p	50V	CCDSL	101K	50	
C7	Electrolytic	0.47	25V	CSSA	R47M	25	
C8	Electrolytic	0.47	25V	CSSA	R47M	25	
C9	Electrolytic	3.3	25V	CEA	3R3P	25	
C10	Electrolytic	3.3	25V	CEA	3R3P	25	
C11	Mylar	0.01	50V	CQMA	103M	50	
C12	Mylar	0.01	50V	CQMA	103M	50	
C13	Mylar	0.0033	50V	CQMA	332M	50	
C14	Mylar	0.0033	50V	CQMA	332M	50	
C15	Electrolytic	100	35V	CEA	101P	35	
C16	Electrolytic	100	35V	CEA	101P	35	
C17	Ceramic	100p	50V	CCDSL	101K	50	
C18	Ceramic	100p	50V	CCDSL	101K	50	
C19	Ceramic	100p	50V	CCDSL	101K	50	
C20	Ceramic	100p	50V	CCDSL	101K	50	

RESISTORS

Symbol	Description		Part No.		
R1	Carbon film	1k	RD¼PS	102J	
R2	Carbon film	1k	RD¼PS	102J	
R3	Carbon film	68k	RD¼PS	683J	
R4	Carbon film	68k	RD¼PS	683J	
R5	Carbon film	180k	RD¼PS	184J	
R6	Carbon film	180k	RD¼PS	184J	
R7	Carbon film	120k	RD¼PS	124J	
R8	Carbon film	120k	RD¼PS	124J	
R9	Carbon film	390	RD¼PS	391J	
R10	Carbon film	390	RD¼PS	391J	
R11	Carbon film	470k	RD¼PS	474J	
R12	Carbon film	470k	RD¼PS	474J	
R13	Carbon film	15k	RD¼PS	153J	
R14	Carbon film	15k	RD¼PS	153J	
R15	Carbon film	2.7k	RD¼PS	272J	
R16	Carbon film	2.7k	RD¼PS	272J	
R17	Carbon film	330k	RD¼PS	334J	
R18	Carbon film	330k	RD¼PS	334J	
R19	Carbon film	27k	RD¼PS	273J	
R20	Carbon film	27k	RD¼PS	273J	

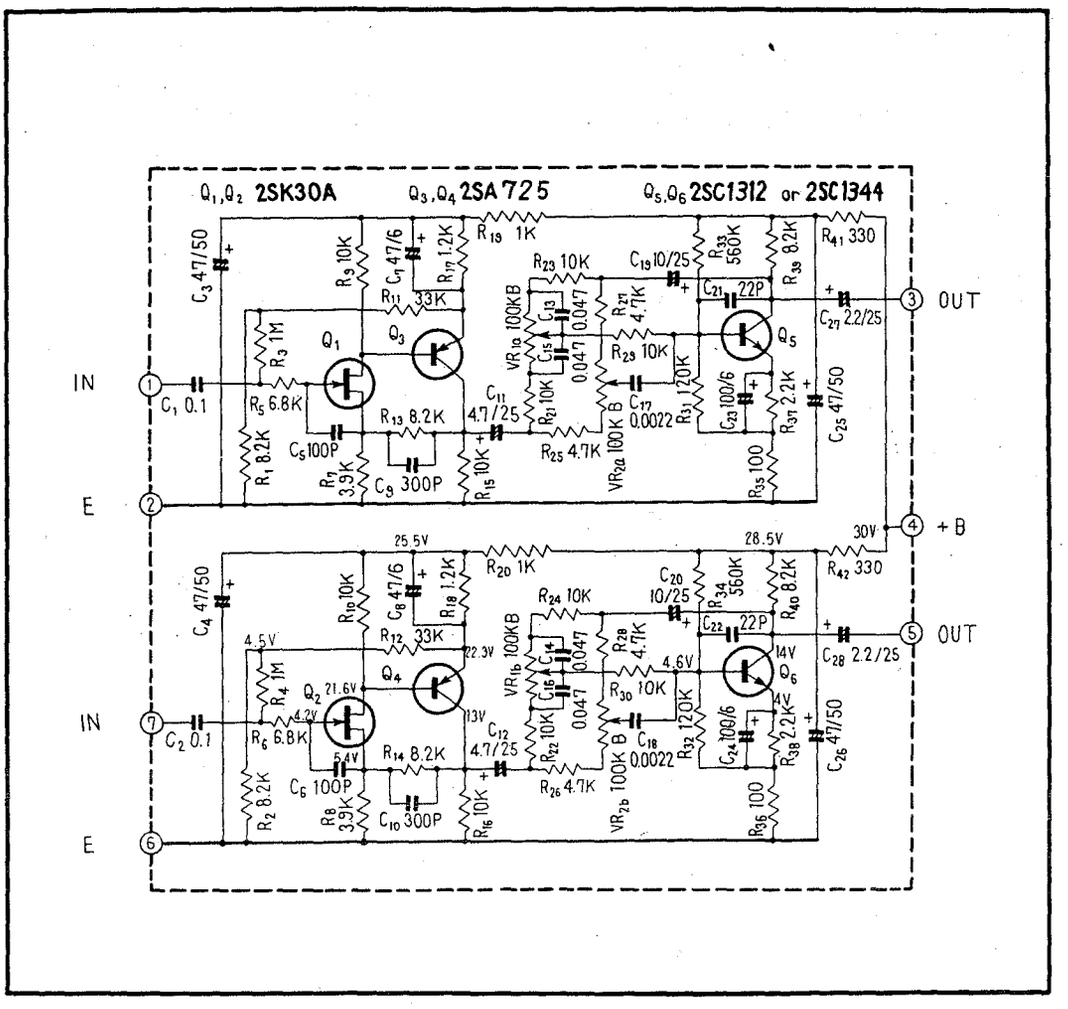
Continued on the next page

Symbol	Description	Part No.	
R21	Carbon film 56k	RD¼PS 563J	
R22	Carbon film 56k	RD¼PS 563J	
R23	Carbon film 2.2k	RD¼PS 222J	
R24	Carbon film 2.2k	RD¼PS 222J	
R25	Carbon film 39k	RD¼PS 393J	
R26	Carbon film 39k	RD¼PS 393J	

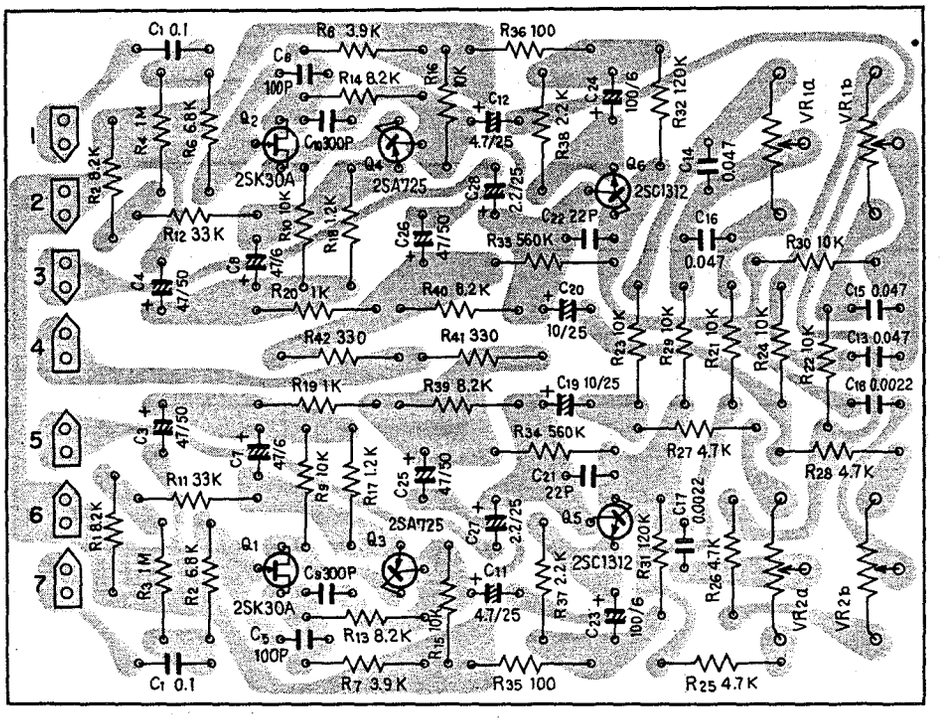
SEMICONDUCTORS

Symbol	Description	Part No.	
Q1	Transistor 2SC1312-G or F 2SC1344-E or D		
Q2	Transistor 2SC1312-G or F 2SC1344-E or D		
Q3	Transistor 2SC1312-G or F 2SC1344-E or D		
Q4	Transistor 2SC1312-G or F 2SC1344-E or D		

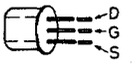
11.4 CONTROL AMPLIFIER ASSEMBLY (AWG-008-A)



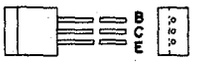
Foil Side



2SK30A



2SC1344



2SA725
2SC1312

Parts List of Control Amplifier Assembly (AWG-008-A)

CAPACITORS

Symbol	Description			Part No.		
C1	Mylar	0.1	50V	CQMA	104K	50
C2	Mylar	0.1	50V	CQMA	104K	50
C3	Electrolytic	47	50V	CEA	470P	50
C4	Electrolytic	47	50V	CEA	470P	50
C5	Ceramic	100p	50V	CCDSL	101K	50
C6	Ceramic	100p	50V	CCDSL	101K	50
C7	Electrolytic	47	6V	CEA	470P	6
C8	Electrolytic	47	6V	CEA	470P	6
C9	Ceramic	300p	50V	CKDYB	301K	50
C10	Ceramic	300p	50V	CKDYB	301K	50
C11	Electrolytic	4.7	25V	CEA	4R7P	25
C12	Electrolytic	4.7	25V	CEA	4R7P	25
C13	Mylar	0.047	50V	CQMA	473J	50
C14	Mylar	0.047	50V	CQMA	473J	50
C15	Mylar	0.047	50V	CQMA	473J	50
C16	Mylar	0.047	50V	CQMA	473J	50
C17	Mylar	0.0022	50V	CQMA	222K	50
C18	Mylar	0.0022	50V	CQMA	222K	50
C19	Electrolytic	10	25V	CEA	100P	25
C20	Electrolytic	10	25V	CEA	100P	25
C21	Ceramic	22p	50V	CCDSL	220K	50
C22	Ceramic	22p	50V	CCDSL	220K	50
C23	Electrolytic	100	6V	CEA	101P	6
C24	Electrolytic	100	6V	CEA	101P	6
C25	Electrolytic	47	50V	CEA	470P	50
C26	Electrolytic	47	50V	CEA	470P	50
C27	Electrolytic	2.2	25V	CSSA	2R2X	25
C28	Electrolytic	2.2	25V	CSSA	2R2X	25

RESISTORS

Symbol	Description		Part No.	
R1	Carbon film	8.2k	RD¼PS	822J
R2	Carbon film	8.2k	RD¼PS	822J
R3	Carbon film	1M	RD¼PS	105JNL
R4	Carbon film	1M	RD¼PS	105JNL
R5	Carbon film	6.8k	RD¼PS	682J
R6	Carbon film	6.8k	RD¼PS	682J
R7	Carbon film	3.9k	RD¼PS	392J
R8	Carbon film	3.9k	RD¼PS	392J
R9	Carbon film	10k	RD¼PS	103J
R10	Carbon film	10k	RD¼PS	103J
R11	Carbon film	33k	RD¼PS	333J
R12	Carbon film	33k	RD¼PS	333J
R13	Carbon film	8.2k	RD¼PS	822J
R14	Carbon film	8.2k	RD¼PS	822J
R15	Carbon film	10k	RD¼PS	103J

Continued on the next page

Symbol	Description	Part No.	
R16	Carbon film 10k	RD¼PS 103J	
R17	Carbon film 1.2k	RD¼PS 122J	
R18	Carbon film 1.2k	RD¼PS 122J	
R19	Carbon film 1k	RD¼PS 102J	
R20	Carbon film 1k	RD¼PS 102J	
R21	Carbon film 10k	RD¼PS 103J	
R22	Carbon film 10k	RD¼PS 103J	
R23	Carbon film 10k	RD¼PS 103J	
R24	Carbon film 10k	RD¼PS 103J	
R25	Carbon film 4.7k	RD¼PS 472J	
R26	Carbon film 4.7k	RD¼PS 472J	
R27	Carbon film 4.7k	RD¼PS 472J	
R28	Carbon film 4.7k	RD¼PS 472J	
R29	Carbon film 10k	RD¼PS 103J	
R30	Carbon film 10k	RD¼PS 103J	
R31	Carbon film 120k	RD¼PS 124JNL	
R32	Carbon film 120k	RD¼PS 124JNL	
R33	Carbon film 560k	RD¼PS 564JNL	
R34	Carbon film 560k	RD¼PS 564JNL	
R35	Carbon film 100	RD¼PS 101J	
R36	Carbon film 100	RD¼PS 101J	
R37	Carbon film 2.2k	RD¼PS 222J	
R38	Carbon film 2.2k	RD¼PS 222J	
R39	Carbon film 8.2k	RD¼PS 822J	
R40	Carbon film 8.2k	RD¼PS 822J	
R41	Carbon film 330	RD¼PS 331J	
R42	Carbon film 330	RD¼PS 331J	

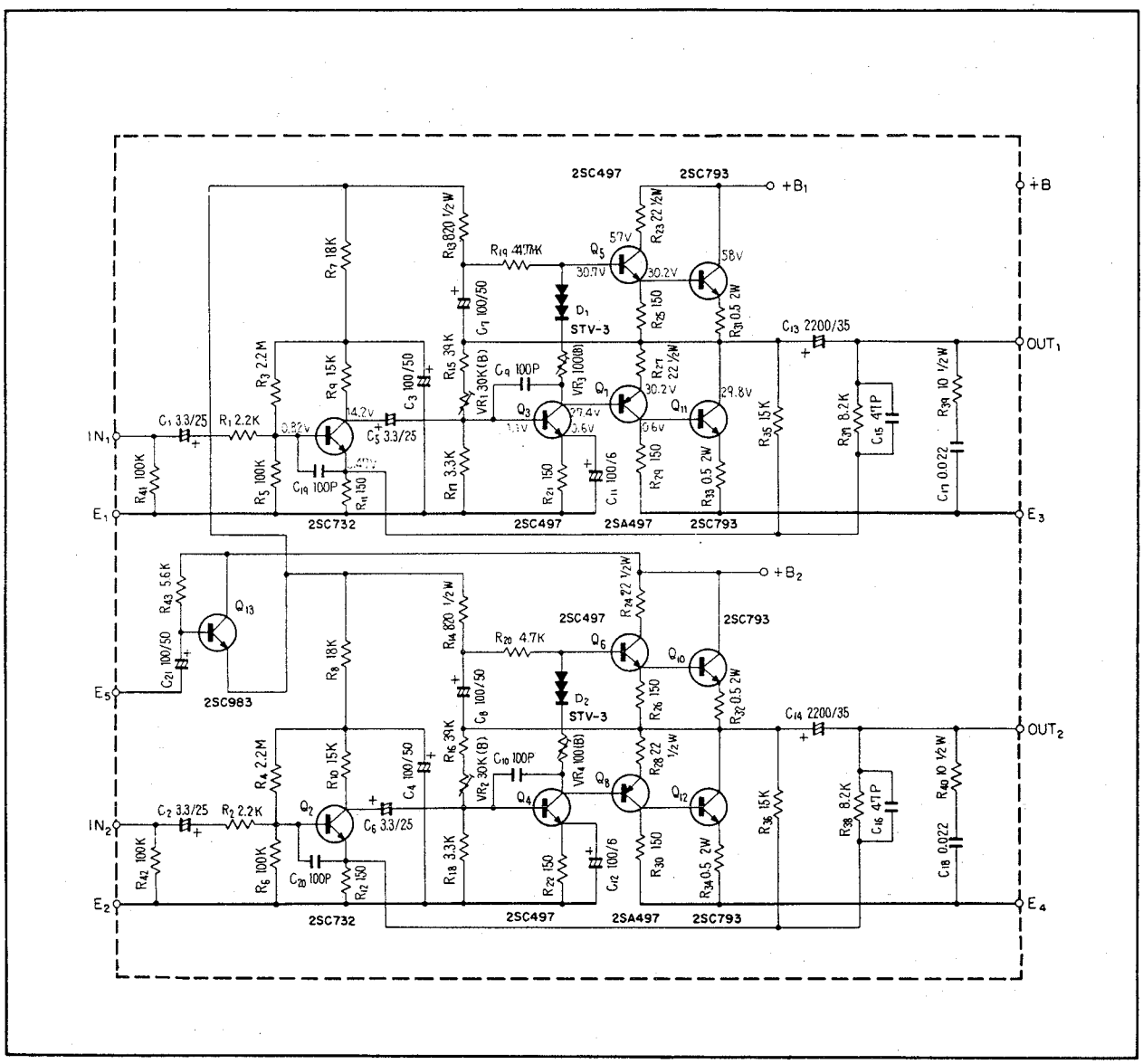
SEMICONDUCTORS

Symbol	Description	Part No.	
Q1	FET 2SK30A-Y or RG		
Q2	FET 2SK30A-Y or RG		
Q3	Transistor 2SA725-F or G		
Q4	Transistor 2SA725-F or G		
Q5	Transistor 2SC1312-F or G 2SC1344-D or E		
Q6	Transistor 2SC1312-F or G 2SC1344-D or E		

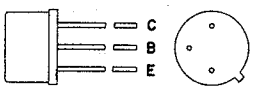
POTENTIOMETERS

Symbol	Description	Part No.	
VR1	Variable resistor 100k-B (Bass)	C82-050-0	
VR2	Variable resistor 100k-B (Treble)	C82-050-0	

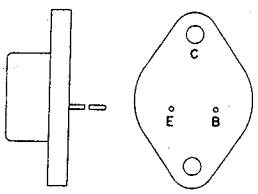
11.5 POWER AMPLIFIER ASSEMBLY (AWH-002-E), (AWH-013-B for NBW model)



2SA497
2SC497

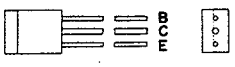


2SC793

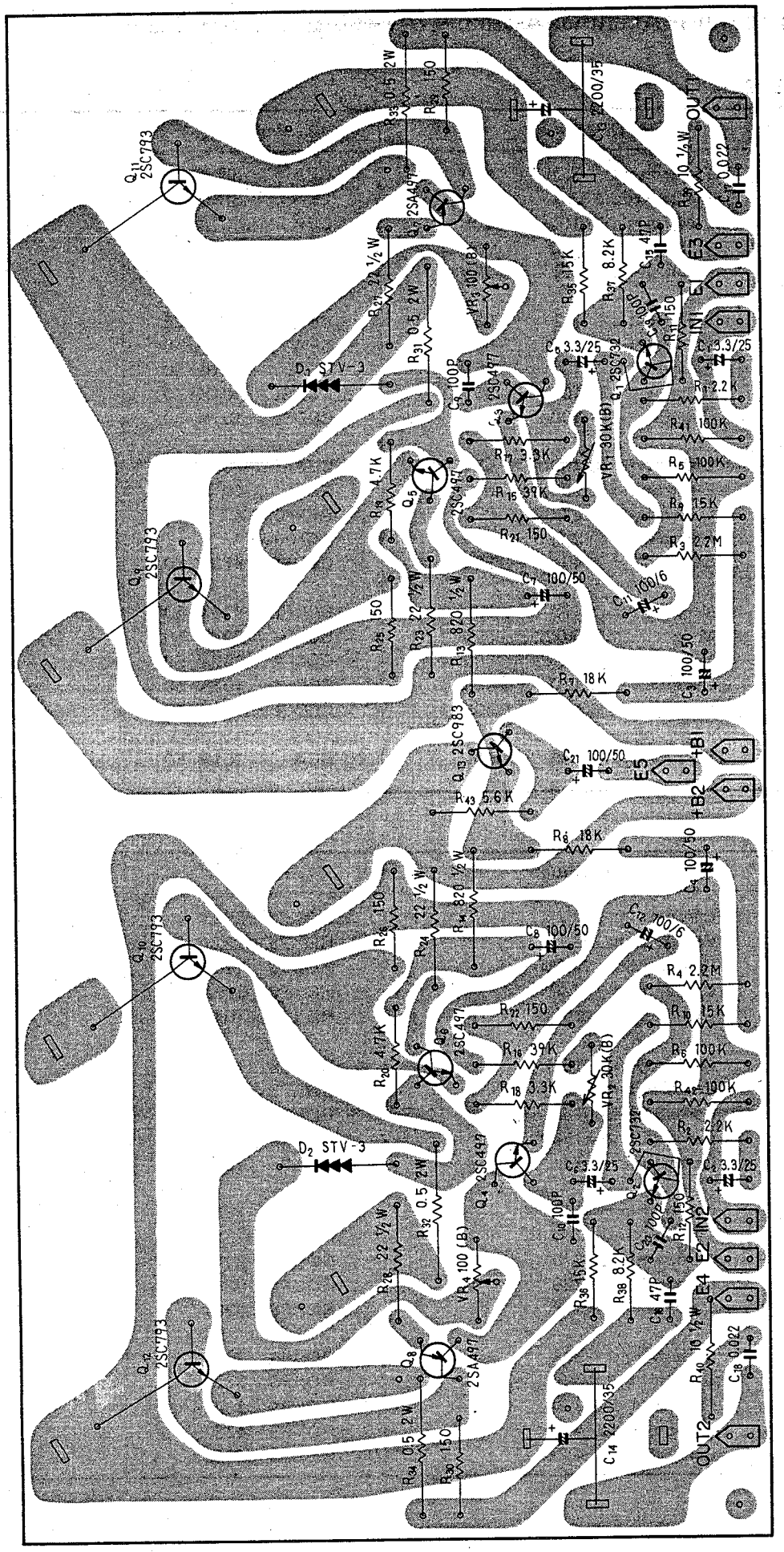


2SC732

2SC983



Foil Side


Q11 2SC793
Q9 2SC793
Q10 2SC793
Q12 2SC793
D1 STV-3
D2 STV-3
Q7 2SA497
Q8 2SA497
Q5 2SC497
Q6 2SC497
Q3 2SC497
Q4 2SC497
Q13 2SC983
Q1 2SC732
Q2 2SC732
R33 0.5 2W
R34 150
R21 22 1/2 W
R31 0.5 1W
VR3 100 (B)
R35 15K
R37 8.2K
C15 47P
C16 100/50
R11 150
C6 3.3/25
C1 3.3/25
R9 2.2K
R41 100K
R5 100K
R9 15K
R3 2.2M
C11 100/16
C7 100/50
R25 150
R23 22 1/2 W
R13 820 1/2 W
R7 18K
C3 100/50
C21 100/50
R43 5.6K
R8 18K
C4 100/50
R26 150
R24 22 1/2 W
R14 820 1/2 W
C8 100/50
C12 100/16
R4 2.2M
R17 15K
R6 100K
R42 100K
R20 4.7K
R22 150
R16 39K
R18 3.3K
VR2 30K(B)
R32 0.5 2W
R28 22 1/2 W
VR4 100 (B)
R36 15K
R38 8.2K
C5 47P
C10 100P
C13 220/35
C14 220/35
R10 1/2 W
C18 0.022
R12 150
C2 3.3/25
R1 2.2K
R40 100K
C17 0.022
R27 4.7K
R15 39K
R21 150
C9 100P
VR1 30K(B)
R19 4.7K
R29 150
R30 150
R33 0.5 2W
C13 220/35
OUT1
OUT2
IN1
IN2
E1
E2
E3
E4
E5
+B1
+B2

Parts List of Power Amplifier Assembly. (AWH-002-E, AWH-013-B)

CAPACITORS

Symbol	Description			Part No.		
C1	Electrolytic	3.3	10V	CEA	3R3P	10
C2	Electrolytic	3.3	10V	CEA	3R3P	10
C3	Electrolytic	100	50V	CEA	101P	50
C4	Electrolytic	100	50V	CEA	101P	50
C5	Electrolytic	3.3	25V	CEA	3R3P	25
C6	Electrolytic	3.3	25V	CEA	3R3P	25
C7	Electrolytic	100	50V	CEA	101P	50
C8	Electrolytic	100	50V	CEA	101P	50
C9	Ceramic	100p	50V	CCDSL	101K	50
C10	Ceramic	100p	50V	CCDSL	101K	50
C11	Electrolytic	100	6V	CEA	101P	6
C12	Electrolytic	100	6V	CEA	101P	6
C13	Electrolytic	2,200	35V	ACH-004-A		
C14	Electrolytic	2,200	35V	ACH-004-A		
C15	Ceramic	47p	50V	CCDSL	470K	50
C16	Ceramic	47p	50V	CCDSL	470K	50
C17	Mylar	0.022	50V	CQMA	223M	50
C18	Mylar	0.022	50V	CQMA	223M	50
C19	Ceramic	100p	50V	CCDSL	101K	50
C20	Ceramic	100p	50V	CCDSL	101K	50
C21	Electrolytic	100	50V	CEA	101P	50

RESISTORS

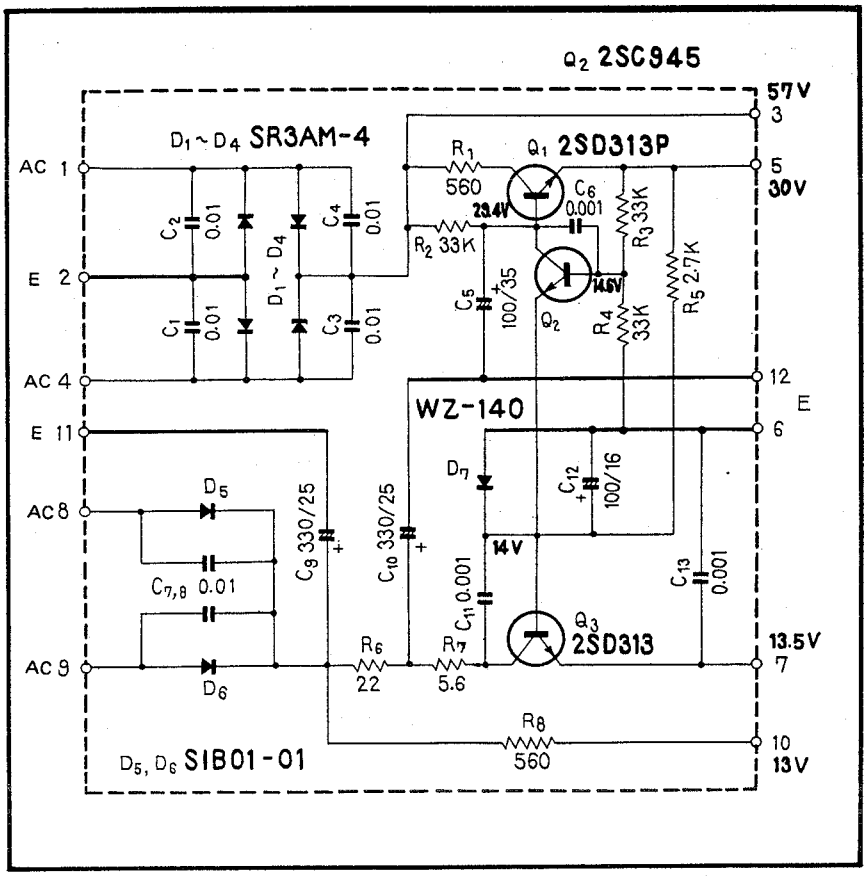
Symbol	Description			Part No.		
R1	Carbon film	2.2k		RD¼PS	222J	
R2	Carbon film	2.2k		RD¼PS	222J	
R3	Carbon film	2.2M		RD¼PS	225J	
R4	Carbon film	2.2M		RD¼PS	225J	
R5	Carbon film	100k		RD¼PS	104J	
R6	Carbon film	100k		RD¼PS	104J	
R7	Carbon film	18k		RD¼PS	183J	
R8	Carbon film	18k		RD¼PS	183J	
R9	Carbon film	15k		RD¼PS	153J	
R10	Carbon film	15k		RD¼PS	153J	
R11	Carbon film	150		RD¼PS	151J	
R12	Carbon film	150		RD¼PS	151J	
R13	Carbon film	820	½W	RD½PS	821J	
R14	Carbon film	820	½W	RD½PS	821J	
R15	Carbon film	39k		RD¼PS	393J	
R16	Carbon film	39k		RD¼PS	393J	
R17	Carbon film	3.3k		RD¼PS	332J	
R18	Carbon film	3.3k		RD¼PS	332J	
R19	Carbon film	4.7k		RD¼PS	472J	
R20	Carbon film	4.7k		RD¼PS	472J	

Symbol	Description			Part No.	
R21	Carbon film	150		RD¼PS 151J	
R22	Carbon film	150		RD¼PS 151J	
R23	Carbon film	22	½W	RD½PS 220J	
R24	Carbon film	22	½W	RD½PS 220J	
R25	Carbon film	150		RD¼PS 151J	
R26	Carbon film	150		RD¼PS 151J	
R27	Carbon film	22	½W	RD½PS 220J	
R28	Carbon film	22	½W	RD½PS 220J	
R29	Carbon film	150		RD¼PS 151J	
R30	Carbon film	150		RD¼PS 151J	
R31	Wire wound	0.5	2W	RT2P 0R5K	
R32	Wire wound	0.5	2W	RT2P 0R5K	
R33	Wire wound	0.5	2W	RT2P 0R5K	
R34	Wire wound	0.5	2W	RT2P 0R5K	
R35	Wire wound	15k		RD¼PS 153J	
R36	Carbon film	15k		RD¼PS 153J	
R37	Carbon film	8.2k		RD¼PS 822J	
R38	Carbon film	8.2k		RD¼PS 822J	
R39	Carbon film	10	½W	RD½PS 100J	
R40	Carbon film	10	½W	RD½PS 100J	
R41	Carbon film	100k		RD¼PS 104J	
R42	Carbon film	100k		RD¼PS 104J	
R43	Carbon film	5.6k		RD¼PS 562J	
VR1	Variable resistor		30k-B	C92-024-B	
VR2	Variable resistor		30k-B	C92-024-B	
VR3	Variable resistor		100-B	ACP-004-0	
VR4	Variable resistor		100-B	ACP-004-0	

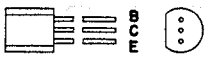
SEMICONDUCTORS

Symbol	Description		Part No.	
Q1	Transistor	2SC732		
Q2	Transistor	2SC732		
Q3	Transistor	2SC497-O or Y		
Q4	Transistor	2SC497-O or Y		
Q5	Transistor	2SC497-O or Y		
Q6	Transistor	2SC497-O or Y		
Q7	Transistor	2SA497-O or Y		
Q8	Transistor	2SA497-O or Y		
Q9	Transistor	2SC793-Y		
Q10	Transistor	2SC793-Y		
Q11	Transistor	2SC793-Y		
Q12	Transistor	2SC793-Y		
Q13	Transistor	2SC983-O or Y		
D1	Varistor	STV-3		
D2	Varistor	STV-3		

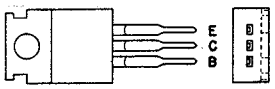
11.6 POWER SUPPLY CIRCUIT ASSEMBLY (AWR-029-A)



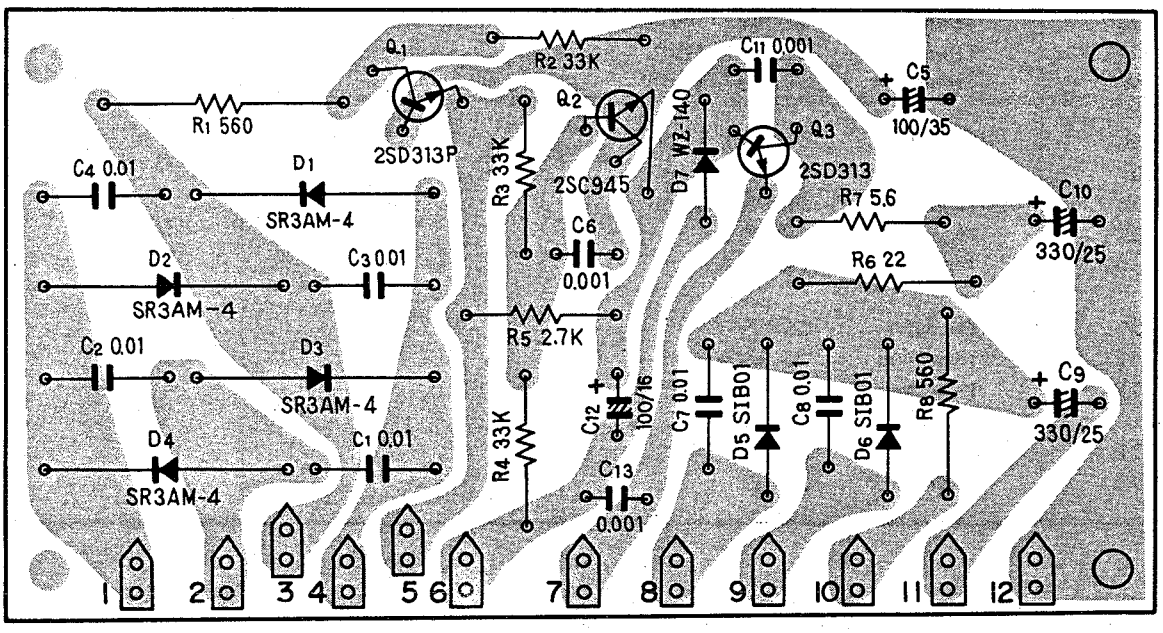
2SC945



2SD313
2SD313P



Foil Side



Parts List of Power Supply Circuit Assembly (AWR-029-A)

CAPACITORS

Symbol	Description			Part No.			
C1	Ceramic	0.01	DC 1.4kV	C43-003-0			
C2	Ceramic	0.01	DC 1.4kV	C43-003-0			
C3	Ceramic	0.01	DC 1.4kV	C43-003-0			
C4	Ceramic	0.01	DC 1.4kV	C43-003-0			
C5	Electrolytic	100	35V	CEA	101P	35	
C6	Mylar	0.001	50V	CQMA	102K	50	
C7	Ceramic	0.01	DC 1.4kV	C43-003-0			
C8	Ceramic	0.01	DC 1.4kV	C43-003-0			
C9	Electrolytic	330	25V	CEA	331P	25	
C10	Electrolytic	330	25V	CEA	331P	25	
C11	Mylar	0.001	50V	CQMA	102K	50	
C12	Electrolytic	100	16V	CEA	101P	16	
C13	Mylar	0.001	50V	CQMA	102K	50	

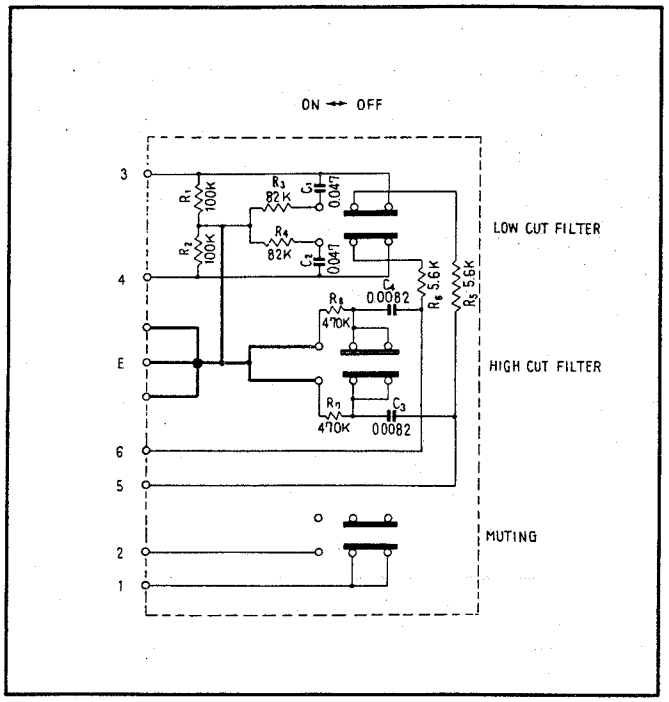
RESISTORS

Symbol	Description			Part No.		
R1	Metal oxide	560	1W	RS1P	561K	
R2	Carbon film	33k		RD¼PS	333J	
R3	Carbon film	33k		RD¼PS	333J	
R4	Carbon film	33k		RD¼PS	333J	
R5	Carbon film	2.7k		RD¼PS	272J	
R6	Carbon film	22	½W	RD½PS	220J	
R7	Carbon film	5.6		RD¼PS	5R6J	
R8	Metal oxide	560	1W	RS1P	561K	

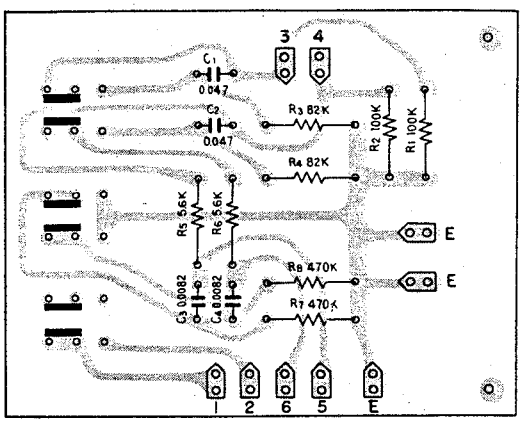
SEMICONDUCTORS

Symbol	Description		Part No.	
Q1	Transistor	2SD313P-E or D		
Q2	Transistor	2SC945-Q or R		
Q3	Transistor	2SD313-E or D		
D1	Diode	SR3AM-4		
D2	Diode	SR3AM-4		
D3	Diode	SR3AM-4		
D4	Diode	SR3AM-4		
D5	Diode	SIB01-01		
D6	Diode	SIB01-01		
D7	Zener diode	WZ-140		

11.7 SWITCH CIRCUIT ASSEMBLY (AWS-013-A)



Foil Side



CAPACITORS

Symbol	Description	Part No.	
C1	Mylar 0.047 50V	CQMA 473K 50	
C2	Mylar 0.047 50V	CQMA 473K 50	
C3	Mylar 0.0082 50V	CQMA 822K 50	
C4	Mylar 0.0082 50V	CQMA 822K 50	

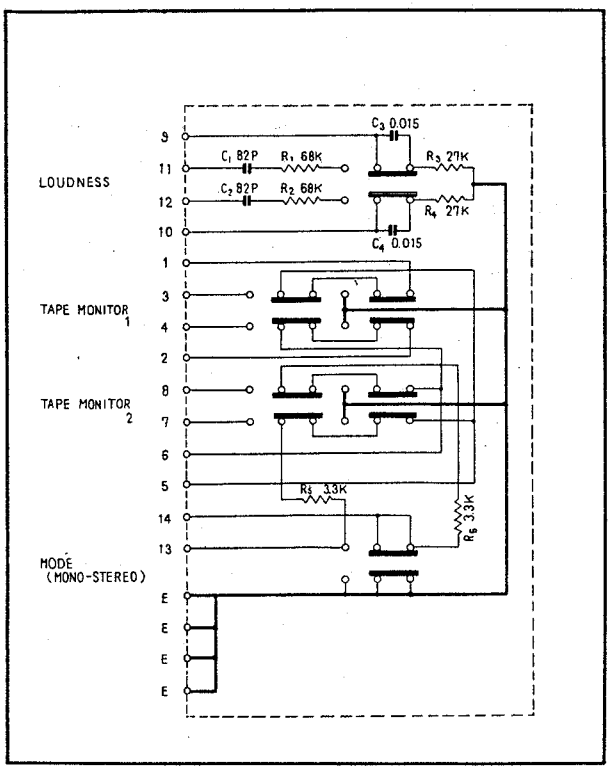
RESISTORS

Symbol	Description	Part No.	
R1	Carbon film 100k	PD¼PS 104J	
R2	Carbon film 100k	RD¼PS 104J	
R3	Carbon film 82k	RD¼PS 823J	
R4	Carbon film 82k	RD¼PS 823J	
R5	Carbon film 5.6k	RD¼PS 562J	
R6	Carbon film 5.6k	RD¼PS 562J	
R7	Carbon film 470k	RD¼PS 474J	
R8	Carbon film 470k	RD¼PS 474J	

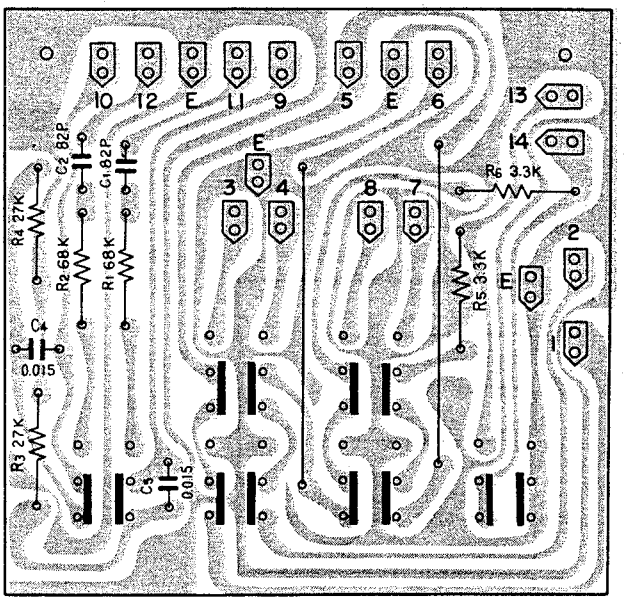
SWITCH

Symbol	Description	Part No.	
	Push switch	S31-035-0	

11.8 SWITCH CIRCUIT ASSEMBLY (AWS-014-O)



Foil Side



CAPACITORS

Symbol	Description	Part No.	
C1	Ceramic 82p 50V	CCDSL 820K 50	
C2	Ceramic 82p 50V	CCDSL 820K 50	
C3	Mylar 0.015 50V	CQMA 153K 50	
C4	Mylar 0.015 50V	CQMA 153K 50	

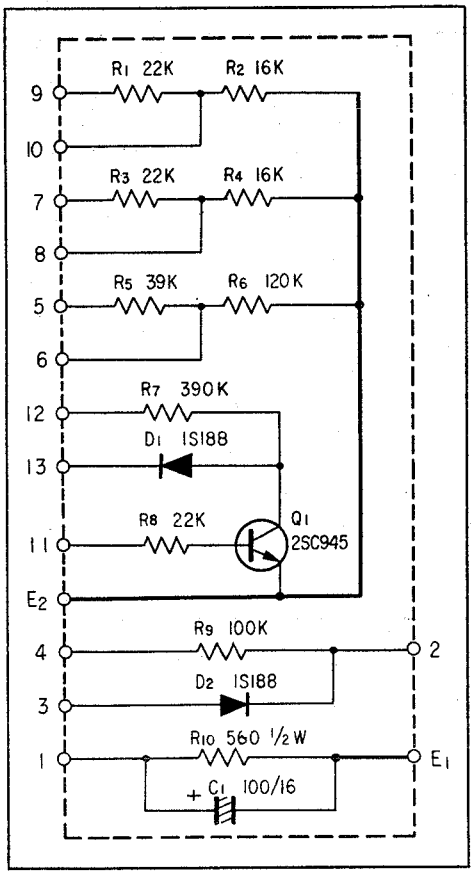
RESISTORS

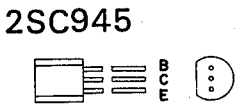
Symbol	Description	Part No.	
R1	Carbon film 68k	RD¼PS 683J	
R2	Carbon film 68k	RD¼PS 683J	
R3	Carbon film 27k	RD¼PS 273J	
R4	Carbon film 27k	RD¼PS 273J	
R5	Carbon film 3.3k	RD¼PS 332J	
R6	Carbon film 3.3k	RD¼PS 332J	

SWITCH

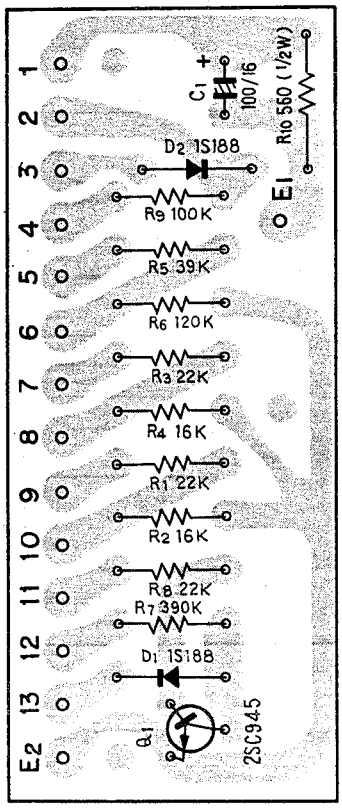
Symbol	Description	Part No.	
	Push switch	ASG-012-0	

11.9 CR & METER DRIVE ASSEMBLY (AWM-050-0)





Foil Side



CAPACITORS, RESISTORS AND SEMICONDUCTORS

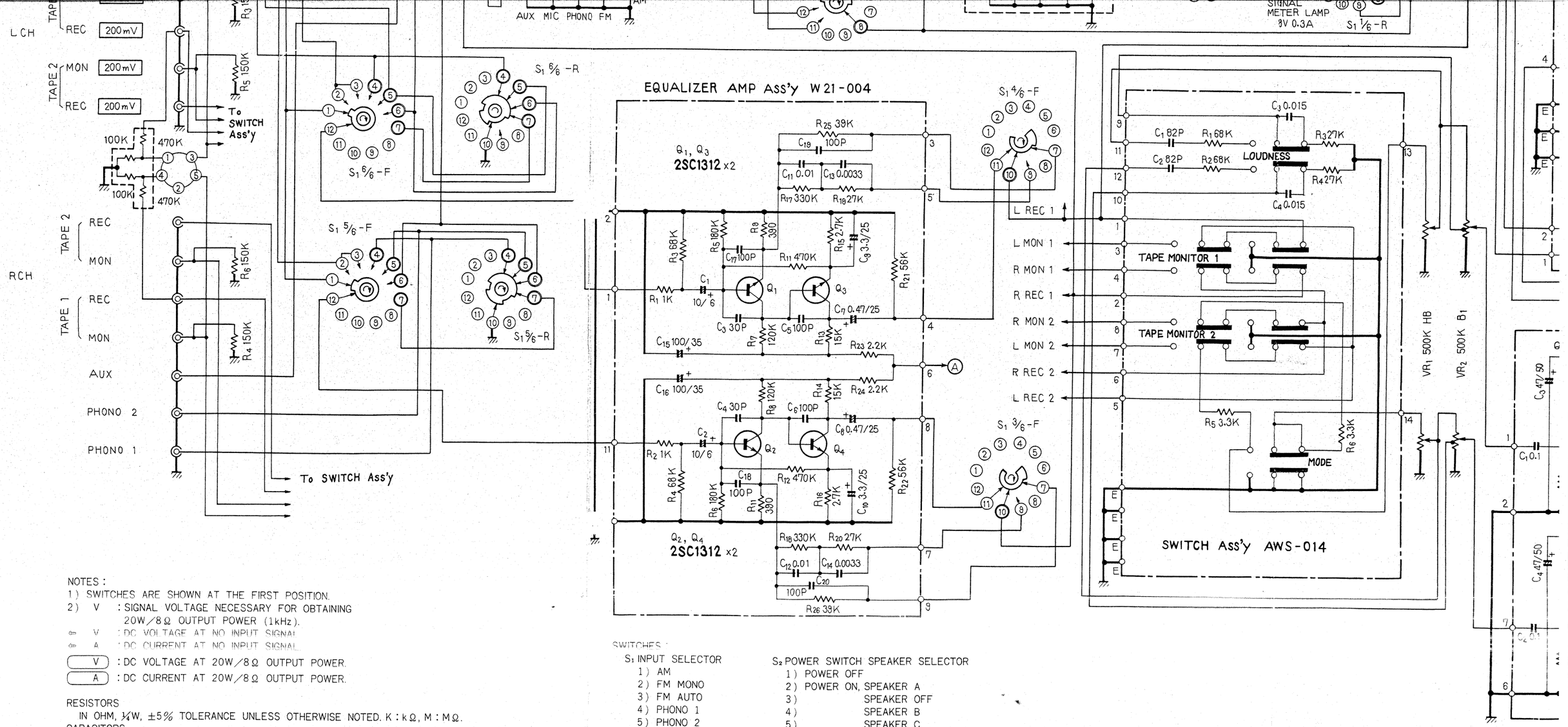
Symbol	Description			Part No.	
C1	Electrolytic	100	16V	CEA 101P 16	
R1	Carbon film	22k		RD¼PM 223J	
R2	Carbon film	16k		RD¼PM 163J	
R3	Carbon film	22k		RD¼PM 223J	
R4	Carbon film	16k		RD¼PM 163J	
R5	Carbon film	39k		RD¼PM 393J	
R6	Carbon film	120k		RD¼PM 124J	
R7	Carbon film	390k		RD¼PM 394J	
R8	Carbon film	22k		RD¼PM 223J	
R9	Carbon film	100k		RD¼PM 104J	
R10	Carbon film	560	½W	RD½PS 561J	
Q1	Transistor 2SC945-Q or R				
D1	Diode	1S188 FM-1			
D2	Diode	1S188 FM-1			

PIONEER SX-626

KCW
KUW
FVZW
FW

TUNER Ass'y AWE-031

Q1 3SK45
Q2 2SC535
Q3 2SC535
Q5 HA1201
Q6 HA1137
Q7 HA1142
Q8 HA1138
D1, D2 1S2076 ×2
F1 F2 F3
T1 T2 T4 T5 T6 T7 T8 T9 T10 T11 T12
L1 L2 L3 L4 L5
S1 2/6-F
S1 3/6-R
S1 1/6-F
S1 1/6-R
S4
VR1 VR2 VR3 VR4
MUT IN
DET OUT
FM OUT
T. MET
MUT AUTO OUT
FM S.MET
MULTI PATH
MPX +B 13±1V
FM L.OUT
FM R.OUT
MPX IN
AUTO IN
IND
AM LOCAL
AM OUT1
AM OUT2
AM S.MET
FM ANT
AM
GND
300Ω BALANCED
FM 75Ω UNBALANCED
FE +B 13±1V
AM +B
BLUE
YELLOW
WHITE
RED
BLACK
MIC 2.2mV
PHONO 1 2.5mV
PHONO 2 2.5mV
AUX 200mV
TAPE 1 MON 200mV
REC 200mV
LCH
LAMP Ass'y AWX-010
6V 0.03A STEREO INDICATOR
8V 0.05A ×5
AUX MIC PHONO FM
DIAL SCALE 8V 0.3A×5
SIGNAL METER LAMP 8V 0.3A
SIGNAL METER
2SC945-



NOTES :

1) SWITCHES ARE SHOWN AT THE FIRST POSITION.
2) V : SIGNAL VOLTAGE NECESSARY FOR OBTAINING 20W/8Ω OUTPUT POWER (1kHz).
⇦ V : DC VOLTAGE AT NO INPUT SIGNAL
⇦ A : DC CURRENT AT NO INPUT SIGNAL
(V) : DC VOLTAGE AT 20W/8Ω OUTPUT POWER.
(A) : DC CURRENT AT 20W/8Ω OUTPUT POWER.

RESISTORS
IN OHM, ¼W, ±5% TOLERANCE UNLESS OTHERWISE NOTED. K : kΩ, M : MΩ.
CAPACITORS
IN μF UNLESS OTHERWISE NOTED. P : pF.

SWITCHES

S_1 INPUT SELECTOR
1) AM
2) FM MONO
3) FM AUTO
4) PHONO 1
5) PHONO 2
6) MIC
7) AUX

S_2 POWER SWITCH SPEAKER SELECTOR
1) POWER OFF
2) POWER ON, SPEAKER A
3) SPEAKER OFF
4) SPEAKER B
5) SPEAKER C
6) SPEAKER A+B
7) SPEAKER A+C

NOTES :
*Neither switch(S_4) nor capacitors(C_{12} & C_{13}) are provided for FTZ-approved unit.
*No switch(S_4) is provided for 120V unit, but capacitors (C_{12} & C_{13}) are provided.
POWER SUPPLY CIRCUIT FOR 120V ONLY MODEL
The asterisked fuses are used for CSA-approved model only.

CR & METER DRIVE Ass'y
AWM-050

POWER SUPPLY CIRCUIT Ass'y AWR-029

POWER AMP Ass'y
AWH-002

SWITCH Ass'y AWS-013

MUT IN
DET OUT
FM OUT
T. MET
MUT
AUTO OUT
FM S. MET
MULTI PATH
MPX +B
13±1V
FM L. OUT
FM R. OUT
5.6V
5.4V
TO EQUALIZER AMP
30V
70mA
57V
52V
13V
90mA
12V(OFF)
2SC945
2SC945-Q.R
2SD313
2SC732
2SC983
2SC497
2SA497
2SC793
WZ-140
SIB01
SR3AM ×4
1S188
1S2473
STV-3
AC 7.5V
3A
BLUE
GREEN
RED
BROWN
ORANGE
YELLOW
WHITE
GRAY
0.5A
1A
SWITCHED 150VA
UNSWITCHED 300VA
110V, 120V, 130V, 220V, 240V
50Hz-60Hz AC
SIGNAL METER
SIGNAL METER LAMP 3V 0.3A
PRE OUT
MAIN IN
L CH
R CH
500mV
HEAD-PHONE
LOW CUT FILTER
HIGH CUT FILTER
LOUDNESS
ON — OFF

SIGNAL METER

PRE OUT L CH / MAIN IN

500mV PRE CH / 500mV MAIN

IAL SCALE
V 0.3A×5

S_1 2/6-R

SIGNAL METER LAMP 8V 0.3A

S_1 1/6-R

SWITCH Ass'y AWS-013

ON ⟷ OFF

LOW CUT FILTER

HIGH CUT FILTER

MUTING

S_1 4/6-F

L REC 1

L MON 1

R MON 1

R REC 1

R MON 2

L MON 2

R REC 2

L REC 2

LOUDNESS

TAPE MONITOR 1

TAPE MONITOR 2

MODE

S_1 3/6-F

SWITCH Ass'y AWS-014

VR_1 500K HB

VR_2 500K B_1

CONTROL AMP Ass'y AWG-008

Q_1, Q_2 2SK30A ×2 Q_3, Q_4 2SA725 ×2 Q_5, Q_6 2SC1312 ×2

Q_1 2SC732

Q_3 2SC497

Q_7 2SA497

Q_{11} 2SC793

Q_2 2SC732

Q_4 2SC497

Q_8 2SA497

Q_{12} 2SC793

Q_{13} 2SC983

D_1 STV-3

D_2 STV-3

D_3 1S2473

IN1

IN2

E_1 E_2 E_3 E_4

OUT1

OUT2

$+B_2$

HEAD-PHONE

S_2 1/2-R

S_2 1/2-F

15.5V

SPEAKERS A

SPEAKERS B

SPEAKERS C

POWER SUPPLY CIRCUIT FOR 120V ONLY MODEL

3A BLUE

0.5A GREEN

0.5A GREEN

RED

RED

BROWN

GREEN 2A

3A

S_2

C_5 0.01

C_4 0.01

SWITCHED 150W

300W

UNSWITCHED

WHITE

60Hz 120V

The asterisked fuses are used for CSA-approved model only.